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Transport Administration in Tropical Dependencies

By George V. O. Bulkeley, C.B.E., M.I.Mech.E.

With Chapters on Finance, Accounting, and Statistical Method

IN COLLABORATION WITH

Ernest J. Smith, F.C.I.S.

(formerly Chief Accountant, Nigerian Government Railway)

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THE RAILWAY GAZETTE

33, TOTHILL STREET, WESTMINSTER, S.W.1

Consumer Interest under Nationalised Industry

THE main theme of an address by Mr. Herbert Morrison to the British Institute of Management at Scarborough on October 16, was the protection of the consumer in socialised industry. Mr. Morrison maintains that, though there is always a risk of expensive service, this is a danger that can be guarded against by a Board stimulated by Parliament and public opinion. There was a wholesome public distrust of monopoly, because in the past competition had given the public the benefits of economic progress, but at the same time competition could mean waste in the uneconomic duplication of plant, etc., and efficiency must always be a major consumer interest. Under the various socialisation statutes, provision had been made for consumer councils, and in this respect they had followed the example set by the London Passenger Transport Act, 1933. In the case of transport, provision had been made for a Central Transport Consultative Committee, quite apart from the Transport Tribunal. There was also an obligation on the part of workers not to exploit their position. Activities of public corporations, moreover, frequently were subject to free competition, notably the road activities of the British Transport Commission and the activities of its Hotels Executive. Mr. Morrison mentioned the thorny subject of "C" licence holders and the fear that traders might fall back on the public service only to meet emergencies or help with peak loads.

* * * *

Mr. A. Dalton, General Manager, East African Railways

At the beginning of last May the Kenya & Uganda Railways & Harbours and the Tanganyika Railways & Port Services were amalgamated under the title of East African Railways & Harbours. This union made the new administration controllers of the largest Colonial railway system, usurping the position previously held by the Nigerian Railway. The last named has a total mileage of 1,903 miles open, whereas the mileage of the Kenya & Uganda Railways is 1,625 miles, and that of the Tanganyika 1,355, a total of 2,980 miles. Mr. Alfred Dalton, who had been Deputy-General Manager, K.U.R., as well as Superintendent of the Line since May, 1942, and Acting General Manager since the beginning of this year, has recently been appointed the General Manager of the combined system. As will be seen from the biographical details published elsewhere in this issue, Mr. Dalton has had a wide experience since he entered the Goods Department of the old Great Southern & Western Railway (Ireland) in 1909. He will be assisted in his administration of the East African Railways & Harbours by Mr. A. F. Kirby, who after being General Manager of the Palestine Railways, has just left England to take up his appointment as Superintendent of the Line.

* * * *

Mr. W. F. Barton

Mr. W. F. Barton, who, as already announced, has retired from the position of Signal & Telegraph Engineer, New South Wales Government Railways, after nearly 58 years of railway service, has had an exceptionally long association with the development of signalling in Australia. The widely varying conditions there call for the use of all types of equipment, from the very simplest on up-country routes to the most complete in the city areas, in some of which the density of the train service calls for the application of the highest class of rapid-transit signalling. Automatic signalling with track circuit control was adopted early in New South Wales, and the first installations were made many years ago under Mr. Barton's predecessor, Mr. C. B. Byles. Since then progress has been continuous, and of late years relay interlocking and the latest developments in telecommunication apparatus have been applied under Mr. Barton's supervision. The address he delivered on taking the chair of the newly-formed Australian Section of the Institution of Railway Signal Engineers, ably expressed the progressive spirit which has animated him in all his work. A portrait and biography of Mr. Barton appear elsewhere.

* * * *

Transport Arbitration Tribunal

Since January last, the Transport Arbitration Tribunal set up under the Transport Act, 1947, has dealt with 33 cases involving 79 stocks, and in 14 of these the values suggested by the B.T.C. have been increased. Higher valuations have been

granted in ten opposed cases, and the four remaining securities were increased in value although the holders did not hold the matter in dispute. With the announcement last week of the awards in three contested cases, results of which are given in our news pages, the first phase of the work of the Tribunal comes to a close. Of special interest as providing further evidence of the unfairness of assessing the value of securities on the market value of stocks is the present case of Trent Navigation. In this, the Tribunal fixed the value of the ordinary stock at £55 as against £15 submitted by the B.T.C. The case for the Commission was that no dividend had ever been paid on the ordinary stock and that the preference stock had paid a dividend only during the period of Government control. At the inquiry the actual position was shown to be that no dividend had been paid simply because profits had been ploughed back—which policy the present Government has advocated so often—and that but for this, the profits had been sufficient to allow a dividend to be paid since 1931.

* * * *

Ulster Transport Authority Organisation

Mr. F. A. Pope, the Chairman of the Ulster Transport Authority, has addressed a message to the staff pointing out that in due course the Authority will embrace the undertakings of the Northern Ireland Road Transport Board, the Northern Counties Committee, the Belfast & County Down Railway Company. Mr. Pope defines the following as the main principles to be applied in creating the organisation of the U.T.A. and in carrying out its objects. He places first a happy and contented staff with constantly helpful supervision, followed by knowledge of the requirements of customers and proper planning of operations and work. Current control of the plans when in operation, retrospective review of the plans so as to effect improvements, together with proper devolution of authority and proper instructions to everyone as to the right methods of working are also included in Mr. Pope's principles of organisation, which conclude with constant research (technical, operational, and commercial) and finally, and above all, the safety of passengers, the staff, and merchandise.

* * * *

The Hub of Iraqi Communications

Modern Iraq seems determined to outshine her neighbours and countries further afield in her buildings, public works, bridges, and, last but not least, railways. Expansion on the grand scale is the order of the day, and in the vanguard is the railway administration, with its extensions in the north-east, great new bridges over the Tigris, Euphrates, and Lesser Zab rivers, and a palatial new terminus in Baghdad. This impressive and pretentious building embodies many outstanding architectural features, as may be seen from the illustrated article elsewhere in this issue, and its park-like approaches are in keeping with its imposing façade. As well as being a terminal station, this block of buildings will house the railway administrative offices. The great practical advantage of the new station will be its replacement of three existing termini, and the accommodation in one structure of all their traffic. Its eight platforms will enable 4 ft. 8½-in. gauge trains to and from the Bosphorus to exchange traffic with others from and to Basra, Khaniqin, Kirkuk, and Erbil on the southern and northern metre-gauge lines. There will also be interchange traffic between those lines, including through traffic from Basra to Persia *via* Khaniqin and to Kirkuk, and *vice versa*.

* * * *

The Importance of Ocean Passenger Traffic

British ports hold a strategic position in the nation's economy, not only because they are the requisite of a fundamentally seafaring race, but because the density of population and high standard of living extant in Great Britain can be supported only by a lively overseas trade. The present effort to balance payments overseas by a prodigious increase in exports brings to the foreground the part played by British ports in the expeditious handling of goods. Although the export drive primarily is concerned with merchandise, the immediate and potential importance of overseas passenger traffic is very considerable and forms an integral part of our trade. An indication of the value of ocean passenger traffic has been provided by the dollar earnings of r.m.s. *Queen Elizabeth* and *Queen Mary* on the New York-Southampton route, and the general proportions of the traffic with Europe are shown by the fact that in 1947, 1,043,690 passengers embarked at United Kingdom ports for the Continent and Europe and 1,060,462 similar disembarkations were registered. The pertinence of a recent review in *The Dock & Harbour Authority* of port facilities required by ocean passenger traffic is suggested by the number of passengers by sea, from beyond Europe, entering and leaving Britain during nine months of last year, which was 136,913 and 173,868 respectively, and is the subject of an article elsewhere in this issue.

* * * *

British Railways Locomotive Testing Station

In August, 1937, the then L.M.S.R. and L.N.E.R. decided to construct and equip, as a joint undertaking, a station at Rugby for testing locomotives. Before the project could get very far, however, the war intervened, and it was not until last Tuesday that it became possible to hold the formal opening. Mr. Alfred Barnes, the Minister of Transport, performed this ceremony by giving the signal to start locomotive No. 6007, *Sir Nigel Gresley*, on the test bed. The changes which have been wrought in transport since the testing station was first contemplated were illustrated by the presence of Sir Eustace Missenden, who presided at the ceremony. Conceived in private enterprise by the two northern railways, the station has been born in nationalisation and at a time when a former General Manager of the old Southern Railway is Chairman of the Railway Executive. The decision to build the Rugby station was inspired by the success of the French plant at Vitry, a description of which appeared in our September 28, 1934, issue.

* * * *

An Auspicious Diesel Debut

On the first up journey made by the two new London Midland Region diesel-electric locomotives working as a twin unit of 3,200 b.h.p., an excellent run was made from Rugby to Euston with the 8.55 a.m. express from Perth. The train consisted of 14 vehicles, weighing 452 tons tare and 490 tons gross, and the net time for the 82·6 miles was no more than 82½ minutes, though as a result of four checks at different points the total time was 93 min. 56 sec. Even the latter, however, was less than the 95 min. at present allowed this train. Moreover, the maximum speeds were rigidly held down to 70-71 m.p.h., and no exceptionally fast running was attempted; yet, despite this restraint and a permanent way check near Wolverton, the train was through Tring, 50·9 miles, in 52 min. 8 sec., 6 min. less than the time allowed. The finest work was on the rising stretch from Bletchley to Tring, 15 miles, which was covered in 14 min. 3 sec.; after a 58 m.p.h. slow through Leighton Buzzard, the locomotive accelerated to 70½ m.p.h. on two miles of level track, and then went up 6 miles at 1 in 333 to Tring Summit at a minimum speed of 63½ m.p.h. The rapid acceleration to 56 m.p.h. up the 1 in 370 incline from Rugby start to Kilsby tunnel was another notable feature of the performance.

* * * *

Richard Trevithick Memoria

Engineers from many parts of the country, and representing three societies, assembled at Pool (near Redruth) on Saturday to honour the name and memory of Cornwall's most famous pioneer in the realm of mechanical engineering, namely, Richard Trevithick. After many delays due to the recent war, and to legal difficulties in connection with the transfer of the land, a monument has been erected on the site of the place where Trevithick was born on April 13, 1771, and this was unveiled by Captain R. E. Trevithick, a great grandson. A eulogy was then delivered by Dr. H. W. Dickinson, co-author with Arthur Titley of the book "Richard Trevithick—The Engineer and the Man," and also joint Honorary Secretary of the Newcomen Society, which was one of the participating bodies. Without concealing Trevithick's defects of character, he paid a deserved tribute to his many inventions, of which the most notable was the high-pressure steam engine that was the forerunner of the railway locomotive. Mr. W. H. Eplett, President of the Cornish Institute of Engineers (the

second of the societies responsible for the monument) handed it over to the custody of the Chairman of the Camborne-Redruth Urban District Council. The official party then inspected a Cornish pumping engine at South Crofty Mine, which was designed in 1854 by Samuel Grose, a pupil of Trevithick.

* * * *

Sir Cyril Hurcomb on Nationalisation's Aims

SINCE Sir Cyril Hurcomb assumed the Chairmanship of the British Transport Commission he has been indefatigable in making contact with all grades of transport employees. He has shown, too, a readiness to explain the objectives of the Commission, which has done much to foster good internal relations in the industry. When he delivered the presidential address to the Railway Students' Association on Wednesday last he not only provided his hearers with an excellent summary of the Transport Act, 1947, under which the Commission has its being, but he devoted some time also to discussing the organisation of the Commission and its Executives, and in doing so dealt with a number of points which have attracted attention or criticism.

Sir Cyril Hurcomb admitted that it might seem a little odd that an Act which specifically placed on the Commission the duty of integrating transport and welding the different forms of transport into a single whole should provide no fewer than five Executives to operate transport and allied services. It might be said that such a scheme ran an obvious risk that each Executive might tend to be concerned primarily with its own form of transport to exclusion of wider considerations. The explanation, he said, was to be found in the size and complexity of the task to be performed. In the case of the Railway Executive a beginning had to be made by welding four very large railways, each with its own technique and traditions, into a single welding unit. Substantial changes in organisation, policy, and practice were inevitable if the Commission was to seize its opportunities for greater economy and higher efficiency which unification brought. It was to ensure that these changes should be thought out and brought about in reasonable time that the Railway Executive had been appointed in part on a functional basis. The emphasis was functional because it was desired to secure first the earliest possible analysis and comparison of differing company techniques and procedures with a view to standardising the best, and, secondly, the after-care, carrying through, and adjustment of the determined policies in the light of accruing experience.

The machinery provided under the Transport Act had been criticised on the grounds that the management was composed largely of technical experts and that the place of the former railway boards of directors had been left unfilled. Sir Cyril Hurcomb's answer was that the functions of the old directors were discharged by the members of the Commission who were not technical experts. Secondly, at Executive level the work of the functional members was co-ordinated by non-functional and non-technical Chairmen.

The process of integration would not easily or quickly be accomplished. The separate Executives had to begin by integrating their own sectors, and the fact that they were separate did not of itself encourage the wider outlook that had to be achieved if integration was to be effective. It was one of the main tasks of the Transport Commission to widen this outlook and create among the whole of the staff a new transport mind. Sir Cyril Hurcomb said that already new loyalties and traditions were beginning to grow, and it was important that they should take in transport as a whole.

On the subject of charges, which at the present time is known to be exercising the minds of many connected with both road and rail transport, he pointed out that the Act gave the Commission almost complete freedom in formulating charges schemes. One of the objectives had to be to aim at charges that would help to guide traffic to the transport best suited to carry it. The difficulties of producing charges schemes that would do this and yet be generally acceptable were formidable.

Under the Act the Commission was instructed to earn sufficient revenue to cover all costs, but the Act did not lay down how that was to be done. The Commission had to find that out, and Sir Cyril Hurcomb admitted that one very definite limit on what could be charged was provided by the freedom given in the Act to "C" licensed vehicles.

British Transport in Transition

PRESIDENTIAL addresses to the Institute of Transport in the past two years provide an interesting reflection on the rapid developments in British transport organisation that have taken place since the war. Last year Mr. T. W. Royle, dealing with "A New Era of Transport," focused attention on the sweeping changes in transport brought about in the changeover from war to peace economy. Mr. David Lamb, an abstract of whose paper appears on another page, one year later was dealing with a period of transition towards the complete integration of transport.

Dealing with the need for education in transport, he emphasised the need to encourage employees to participate in the proceedings of the Institute. Deploring diffidence on the part of the transport people to take part in public discussion for fear of incurring the displeasure of their superiors, Mr. Lamb gave a broad hint that the "fairly rigid censorship," which in some cases had been exercised, was being abandoned.

In the case of the railways, unification implied in theory that they should be managed as one system from one headquarters, exercising functional control through divisional officers on the same principles as those applying to any one of the former companies. But, Mr. Lamb asked, could such a system of control be effective over so widespread and intricate an organisation? The present set-up with Chief Regional Officers and with headquarters executive officers exercising functional control was regarded as an initial step and its efficacy had yet to be proved. In some respects it must be embarrassing to the executants, particularly C.R.Os, who may feel that they could not achieve efficiency without full authority within their Regions. Second thoughts often were best, and an arrangement which gave full authority to the C.R.O. and made him the medium for all major directions from the Executive should with proper understanding secure the advantages obtainable from unification, provided the Regions were kept within workable size and the importance of local contacts within the Regions fully appreciated.

Mr. Lamb's address was by no means confined to railway subjects, and among a number of important matters which he dealt with was that of the large increase in "C" licensed vehicles which had occurred during the last few years. He did not show the concern which has been voiced at this movement. In his view it is probable that the total of "C" licensed vehicles which are now in service is no greater than it would have been if the pre-war annual increase had continued throughout the war years, and he adduced a number of other factors which would tend to increase the use of this form of vehicle. He did not consider that anything in the nature of a threat to the public transport services was involved, because the "C" licence vehicle tended to relieve the public transport system of work that was specialised and detailed, and of a kind which public transport would find difficult to fit into its general service operations. As soon as the British Transport Commission got into its stride and there was some indication of the type and level of charges as well as of the services it could offer, Mr. Lamb thought the position would adjust itself.

* * * *

British Transport Commission Traffics

BRITISH Transport Commission receipts for the four weeks to October 3 were £30,784,000, an increase of £2,766,000 over the similar period of last year. This additional revenue continued to fall short of the amount required under the estimates made before the introduction of higher rates and charges last year. The current statement of receipts by the Commission marks an interesting stage, for it includes three days of October when rates and fares for both 1947 and 1948 were 55 per cent. over immediate pre-war charges. The rise in charges that took effect on October 1, 1947, was of the order of 16¼ per cent. for passengers and 24 per cent. for other traffics. It was estimated that these increased charges would yield an additional revenue of £65 million for 1948, but it is clear that this expectation will not be realised, especially when it is noted that for the whole 40 weeks of the current year the advance in railway receipts has been but £35,143,000.

The best showing in the four-weekly period was made by coal and coke receipts, which at £5,392,000, advanced by

£1,060,000. Passenger revenue at £9,746,000 increased by £438,000. Merchandise and livestock was £211,000 greater at £6,451,000. Mineral traffic yielded £2,294,000, an increase of £567,000. London Transport receipts totalled £4,497,000, an increase of £293,000, and Inland Waterways returned £135,000, a decline of £3,000.

—	Four weeks to October 3		Incr. or decr.	Aggregate to October 3		Incr. or decr.
	1948	1947		1948	1947	
	£000	£000	£000	£000	£000	£000
British Railways (receipts from railway working)						
Passengers	9,746	9,308	+ 438	98,882	91,712	+ 7,170
Parcels, etc., by passenger train	2,269	2,069	+ 200	22,427	19,749	+ 2,678
Merchandise & livestock	6,451	6,240	+ 211	64,472	55,087	+ 9,385
Minerals	2,294	1,727	+ 567	21,853	15,647	+ 6,206
Coal & coke	5,392	4,332	+ 1,060	50,571	40,867	+ 9,704
	26,152	23,676	+ 2,476	258,205	223,062	+ 35,143
London Transport—						
Railways	1,096	1,026	+ 70	11,156	10,094	+ 1,062
Buses & coaches ...	2,520	2,329	+ 191	24,413	21,992	+ 2,421
Trolleybuses & trams ...	881	849	+ 32	8,656	7,987	+ 659
	4,497	4,204	+ 293	44,225	40,073	+ 4,142
Inland Waterways—						
Tolls	63	54	+ 9	580	473	+ 107
Freight charges, etc. ...	72	84	— 12	700	676	+ 24
	135	138	— 3	1,280	1,149	+ 131
Total	30,784	28,018	+ 2,766	303,710	264,284	+ 39,426

For the 40 weeks of the current year, British Transport Commission's total traffic receipts were £303,710,000, an advance of £39,426,000. The preponderating influence of the railways is shown by the fact that the total gross revenue from this source is £258,205,000, an increase of £35,143,000. London Transport total revenue for the 40 weeks is £44,225,000, an increase of £4,152,000, and that of Inland Waterways, £1,280,000, an increase of £131,000. Details are given above.

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South African Railways & Harbours

PRELIMINARY details of the report for 1947 of Mr. W. Marshall Clark, General Manager, South African Railways & Harbours, state that throughout the year numerous requests were received for the construction of railway lines. In the majority of cases it appeared on examination that the cost of construction would be prohibitive in view of the high prices and scarcity of materials. The difficulties in obtaining permanent way material have made it essential to conserve supplies and use them mainly for maintenance purposes and the construction of short service lines where necessary to relieve congestion in certain areas.

Some 50 miles of private sidings for which no material is available at the moment have been approved, and the applicants advised that, should they be able to obtain the material, the Administration would proceed with the construction. The year was characterised by intensive traffic activity which called for maximum possible use of the engine-power and rolling stock resources. Imports of all kinds were maintained at a high level, industries were expanded, and the output of agricultural products increased considerably.

Although the acquisition of new engines and rolling stock helped to a great extent, these gains were offset partially by the fairly extensive scrapping necessary during the year. In these circumstances it was not possible to relax intensive working. Carriage of the principal agricultural products showed a substantial increase over the figures for the previous year, and other commodities, except coal, also were conveyed in increased tonnages. The total tonnage of coal conveyed during 1947 was 19,974,208, or 231,371 below that for 1946. The decline of 1 per cent. is ascribed to the greater provision which had to be made for other classes of traffic. There was a great increase in the quantity of petrol conveyed in bulk from the ports, 230,004,000 gal. having been carried as against 200,273,000 in 1946. Long-distance passenger traffic declined compared with the previous year, but suburban traffic increased by nearly 3,000,000 passenger journeys.

The number of new locomotives placed in service was 111, of which eleven were class E—3 electric units. Goods wagons added to stock amounted to 2,616 units of various kinds. Coaching stock and wagons in large numbers were on order at the end of 1947, including 54 electric motor coaches and vans.

South African Airways carried a total of 98,558 passengers during 1947. The number of flights totalled 15,536, and aircraft mileage amounted to 7,980,073. The average percentage of passengers carried as compared with the total number of disposable seats amounted to 66 per cent. on local and regional services, and 77 per cent. on the trunk services. Nineteen Lodestars, two Dakotas, seven Skymasters, eight Vikings, and two Dove aircraft are now used for these services.

At the end of 1947 the route mileage covered by the departmental road motor services had reached a total of 23,089, an increase of 1,565 miles over the figure for 1946. A loss of £545,864 was sustained, but the Board considers that such losses are, in general, justifiable, as frequently it is only by such services that large tracts of country, which would otherwise be deprived of access to markets, can be opened up.

During the year, revenue from all services operated by the Administration reached the record total of £80,102,989 because of increased receipts from goods, coal, and parcels traffic, and also increased earnings from harbour and airways services. Working expenditure also reflected a considerable increase and during the year aggregated £79,477,758. Factors which contributed to the higher expenditure were increased cost-of-living allowance payments, additional traffic requirements, and the enhanced cost of materials.

Taking into account the ordinary appropriation from revenue of £761,948, the working for the year resulted in a loss of £136,717. The appropriation from revenue represents a contribution to the betterment fund. As at December 31, 1947, the balances standing to the credit of some of the more important funds were: betterment fund £2,869,504; renewals fund £8,290,724; rates equalisation fund £7,735,356; pension and superannuation fund £46,430,696.

* * * *

Net Revenue of U.S.A. Railways in 1948

ON June 25 we discussed the position of the U.S.A. railways in the light of their 1947 performance. Details of railway revenues and expenses for the first half of 1948 came to hand early in September and a summary of the results will bring our previous article down to date. It shows on the whole little improvement in the financial results, although increased rates and fares are now in force.

For the half year the total operating revenue of the Class 1 railways was $4,607 million, an increase of $453 million, or 10·9 per cent., on the first six months of 1947. Freight revenue was higher by $429 million, or 12·7 per cent. Passenger revenue was nearly 1 per cent. below 1947 and represented less than 10 per cent. of the total revenue. The Government paid $22 million more for the conveyance of mail, a rise of 32 per cent., but parcels takings were 2 per cent. down.

On the other side of the account, operating expenses of $3,649 million were $399 million higher, or 12·3 per cent. The operating ratio went up from 78 to 79 per cent., but the net operating revenue of $958 was 5·9 per cent. better. Finally heavier taxes and equipment rents left the railways at June 30 with a net railway operating income of $411 million, 9·9 per cent. above 1947.

For the 12 months ended June 30, the rate of return on property investment was 3·6 per cent. The railways are thus far from earning the 6 per cent. return which they need to finance development programmes. Results for 125 individual railways show that, save for a few of the smaller lines, all had an increase in freight revenue this year. Passenger revenue declined everywhere, except in the eastern district. The New York Central, the New York, New Haven & Hartford, the Erie nad some small eastern lines have had moderate increases.

The Pennsylvania is, however, the leading passenger railway in the States and its takings were $1,347,000 lower than in 1947, though they were still equivalent to 16 per cent. of the total passenger revenue of all the Class 1 systems. The Pennsylvania admitted in its annual report for 1947 that passenger travel was no longer a source of net revenue and added that a

daily total of 25,500 unprofitable passenger train-miles had been eliminated, largely on branch lines. This turn of events has not deterred the "Penna" from ordering new equipment on a lavish scale for through trains in the hope of expanding long-distance travel. The illustrations of one of its new cars in our September 17 issue will give some idea of the luxurious accommodation which is being provided.

The New York Central claimed to have undertaken the largest post-war improvement programme of any railway. The Pennsylvania seems bent on outvying its rival, but there is no certainty that either of these great railways will draw dividends from their expenditure on new sleeping cars, coaches, diners and lounge cars, hauled by diesel-electric locomotives. The Pennsylvania has fallen to the fifth place among the American railways, judged by net railway operating income, while the New York Central lags far behind a number of lines with less mileage. The first paid a dividend of 1 per cent. last year, partly from money earned in previous years; the second passed its dividend as it did in 1946. If they do better in 1948, the credit will go to freight carryings and not to passenger business.

* * * *

East African Port Administration

CERTAIN shipping interests at the East African ports for some time have been agitating for greater control over the ports' management. This agitation crystallised recently in the form of certain motions put forward by the Mombasa and Dar-es-Salaam Chambers of Commerce for consideration at the annual meeting of the Associated Chambers of Commerce Industry.

The motions propose that a General Manager of the East African Ports & Harbours should be appointed, equal in status to the General Manager of the East African Railways. This official would be advised by the Inter-Territorial Sub-Committee for Ports & Harbours Services, whose recommendations would be submitted through him to the East African Transport Advisory Council and to the Commissioner of Transport. Further proposals are that responsible managers should be appointed at the major ports such as Mombasa, Tanga, Dar-es-Salaam, and, in the early future, Mikindani; that the control of all rolling stock and cranes in the port should be under the port manager; that the General Manager of Ports & Harbours should have his office on the coast, at either Mombasa or Dar-es-Salaam; and that at each of the major ports there should be a local Harbour Advisory Board on which there would be representation for producers, commercial and shipowning interests, the Railway, and such Government representation as might be deemed desirable. It would also be the duty of each local Harbour Advisory Board to advise the Inter-Territorial Ports & Harbours Services Sub-Committee, through the local Port Manager and the General Manager of Ports & Harbours, on all matters affecting the interests of the ports within the Board's jurisdiction. For instance, the Board at Mombasa would be responsible for advising on such facilities as might be justified at such outports as Lamu and Kilifi, and that at Tanga for Pangani. The same principle would apply to the Boards at Dar-es-Salaam and Mikindani.

These proposals have provoked a spirited reply from the Editor of the *Kenya Weekly News*, who points out in a special article that the disadvantages of an "autonomous" port authority are so obvious that its advocates will have to present a very strong case, supported by expert opinion, to convince the people of East Africa that it is likely to ensure a more efficient service. In 1939 the total of import and export traffic handled at Kilindini was 1,205,555 tons. In 1941, with virtually no increase of equipment, when military traffic was at its peak, the port handled 2,101,970 tons of inward and outward traffic. During the late war thousands of troops and hundreds of thousands of tons of stores and munitions went by sea to Kilindini and were carried by the railway to camps and bases whence the offensive against the Italians in Somalia and Ethiopia was launched. By supreme effort during the most critical period of the war the railway administration brought about a great increase of traffic which sent into Kilindini many times the number of wagons normally used there before the war.

At the end of the war repairs and maintenance had to be brought up to date and there was great difficulty in obtaining new engines, rolling stock and spares. Nevertheless, in 1947 the port of Kilindini handled 1,918,483 tons of import and export traffic. In 1946 Cape Town handled 1,895,628 tons with a quay shed frontage of 7,554 ft.; in 1947 Kilindini handled 1,918,483 tons with 3,873 ft. of quay frontage.

"These facts are more impressive than the petty points, and the hypothetical points, made by some of the advocates of an 'autonomous' port," comments the same Kenya newspaper, which goes on to point out that in the case of Dar-es-Salaam the normal pre-war traffic was about 270,000 tons, while in 1947, mainly as a result of the commencement of the groundnuts scheme, it rose to 435,000 tons and is still rising.

There was some congestion at Kilindini early this year as a result of an unprecedented rush of imports. Those in authority knew it was a temporary phase, but the local agents of the shipping companies gave the situation somewhat exaggerated press publicity. For several weeks now the port has been back to normal and now there is not enough traffic to keep a full train service in operation in the Mombasa-Nairobi section. These facts clearly indicate that there are no grounds for any separation of the Kenya & Uganda Railway Administration from the management of the ports. As the colonial editor pertinently suggests: "If the Chambers of Commerce consider that something is radically wrong with the administration of the ports they would be well advised to urge that the matter be examined by qualified experts, rather than to propose a 'political' or 'constitutional' solution of a technical problem of which their practical experience must be very limited."

* * * *

The Swan Song of British Indian Railways

DETAILS have just come to hand of the last full year's working of the Indian railways under British administration, as embodied in the Railway Board's administration report for the year ended March 31, 1947. On that date the total route-mileage of all lines open for traffic was 40,524, and a further 388 miles were under construction; 189 additional miles had been sanctioned, but work on them had not then begun. The corresponding capital at charge was just over £660 million or about £16,300 a mile. To work this great system, 1,046,855 employees of all grades were required, and of this total, 1,014,379 were employed on the 13 Class 1 lines. No fewer than 184,000 were on the East Indian Railway, and four other lines each had over 100,000. There were then 494 European gazetted officers on the nine largest lines owned by the Government of India.

The following are a few facts selected at random concerning the peninsula-wide system. The rolling stock in service in March, 1947, consisted of (a) 5,935 broad (5 ft. 6 in.)-gauge locomotives, including 68 electric and 25 diesel-electric engines; (b) 2,666 metre-gauge locomotives, all steam; and (c) 531 narrow-gauge (2 ft. 6 in. and 2 ft.) locomotives, or 9,132 in all. Coaching vehicles numbered 25,298, 10,118 of them being broad gauge; the corresponding figures for wagons were 164,386 and 110,403. On the broad-gauge lines the high percentages of both coaching and goods vehicles fitted with automatic brakes were particularly remarkable. On four lines, the B.B.C.I.R., G.I.P.R., N.W.R., and Mysore Railways, 100 per cent. of the coaching vehicles were so fitted, and none of the other major systems had fewer than 96 per cent. automatically braked. Even on the principal metre-gauge lines from 64 to 99 per cent. of the coaching vehicles were fitted with vacuum brakes. More outstanding, perhaps, was the percentage of 5-ft. 6-in. gauge wagons with automatic brakes; it varied on different railways between 76 and 96 per cent. of the 110,000 total goods vehicles. Moreover, on nearly every line almost all the remaining wagons were piped. There must be few countries, except where mountainous regions abound, that have better records of braked stock than has India.

It is also a land of long journeys, great bridges, extremes of gradients—thousands of miles have ruling grades of 1 in 500, and also many miles on end of 1 in 50, 1 in 33, and even 1 in 25 in the hills—and cheap freights and fares. In 1946-47, the average distance a passenger—whether first, second, intermediate, or third class—was carried on broad-gauge lines was 38·0 miles, at an average fare of 0·394d. a mile. These few facts may help to recall the many and important achievements for which the British administration of Indian railways was responsible during the century it guided them, and also to record the position in which it left them.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Hot Water on the Eastern Region

50, Fairholme Road,
W.14. October 4

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—This last week-end I travelled from Manchester to London by the former L.N.E.R. Sometime during that journey I went for a wash, and when I placed my hand under the tap and pressed the red button the water came out hot—very.

You can imagine the shock that this gave to one who, since his earliest days, has been a customer exclusively of the L.M.S.R. and S.R.!

Yours faithfully,
H. H. BRIDGE

Locomotive Liveries

"Ravensbourne," Berkhamsted,
Herts. September 30

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Notwithstanding the invitation of the Railway Executive to the public to express its opinion on the colours to be adopted, there seems little doubt that black with former L.N.W.R. lining has already been decided on, as passenger engines of all types, large and small, have been appearing lately in this guise.

This makes an interesting sidelight on the old rivalry between the L.N.W.R. and the Midland, in that the former have at last got their own back! It will be recalled that at the grouping Crewe did not take at all kindly to "Midlandisation" when M.R. types were adopted as standard, the Midland numbering system introduced, and, perhaps, greatest insult of all, North Western engines were painted in Midland red. Now, 25 years later, we have the spectacle of former Midland engines appearing in L.N.W.R. colours. Truly the tables have been turned with a vengeance!

It is difficult to understand why red has been so conspicuously ignored in these colour trials. Not the gaudy post office red, please, but the rich and dignified Midland lake would have made an excellent livery for British Railways—a good hard-wearing colour and pleasing in appearance. Can one detect after all a lingering anti-Midland bias inherited from Crewe on the part of the present powers-that-be concerned with this question?

Yours faithfully,
H. C. CASSERLEY

[We do not agree that Post Office Red is gaudy.—ED., *R.G.*]

French Train Services

9, Keble House, Manor Fields,
London, S.W.15. October 3

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—During my recent holiday in France I was led to the reluctant conclusion that travellers using the Southampton-St. Malo route this summer and entraining at the latter port either for La Baule and its contiguous resorts or for Nantes and its environs were given, except for a brief period during August, a deal very far from square.

Stated baldly, the fastest journey to Nantes occupied 8 hr. 20 min. and that to La Baule as much as 10 hr. 19 min., involving distances of 266 and 318 miles respectively; this was brought about through passengers having to take the 10.25 a.m. express from St. Malo as far as Le Mans and, after a 1¾ hr. wait there, joining the 1.55 p.m. express from Paris Montparnasse. The problem of reaching either of the destinations named by the most direct (!) routes of roughly 150 miles in each case could be solved only by irksome changes and wearisome waits at Rennes, Redon, and Savenay. So much of the day was expended in this process that our hopeful "voyageur" could not expect to see Nantes before 9.44 p.m. or La Baule before 10.49 p.m.—roughly 13¾ and 14¾ hr. respectively after the good ship *Falaise* had anchored in St. Malo roadstead.

The corresponding return journeys were, admittedly, a trifle less protracted, but the snag here lay in the fact that a start had to be made at the crack of dawn (from La Baule the departure time was actually 5.42 a.m.), and the arrival at St. Malo (4.27 p.m.) left a gap of 3½ hr. to be filled before sailing time.

Our own experience was a somewhat poignant one, and this is where I return to the short-lived "exception" alluded to earlier. As Nantes was our first port of call, we had intended to journey thither *via* La Baule, utilising the 11 a.m. railcar from St. Malo—the first notice of which, incidentally, came from a perusal of your issue of August 6. This railcar was due at La Baule at 2 p.m., and by taking the 4.30 p.m. ordinary train from there to Nantes we could have got to our destination in the best (but hardly the optimum) overall time of 7 hr. 10 min. from St. Malo. However, the very day we arrived in France the aforementioned car (which had not been operated by the S.N.C.F., but by the municipality of La Baule, and apparently through insufficient and/or tardy propaganda had involved the local authorities in a heavy loss) was cancelled, surely the unkindest cut of all! The sequel had its grimly humorous side, as a taxi-driver was induced to carry us for an enormous recompense over the intervening 15 miles to Dol, where we embarked on a direct train to Rennes and a Michelin railcar onwards to Nantes, reaching there at 1.20 p.m., nearly 5 hr. ahead of our fondest hopes!

Such a recourse as the foregoing is not, I fear, to be recommended to currency-starved pilgrims from these isles when workable alternatives are available. Nevertheless, our trip from Dol to Nantes on this occasion took only 2 hr. 56 min., and goes to show how the railway authorities, with more judicious planning of their schedules in general and of their connection at the key points of Rennes, Redon, and Savenay in particular, could benefit the many visitors to this unusually interesting and attractive part of France.

It was not surprising that, faced with a distinct paucity of rail facilities, holidaymakers in these areas who had to rely on public means of transport, should have availed themselves of the services provided by a motorbus company.

Yours faithfully,
J. E. L. SKELTON

Waverley Buffet

The Gyles House, Pittenweem,
Fife. October 1

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—On Monday, September 27, I arrived in Edinburgh at 9 a.m. and made straight for the comparatively new Waverley Buffet which was opened a few weeks ago with a certain amount of pomp and ceremony. The place looked so dismal and was so overcrowded that I went elsewhere for a cup of coffee.

However, I had tea there at 4.30 p.m. on the same day. In view of the song and dance created at the opening of this buffet it may be of interest to record my impressions, which were as follows: gloomy and depressing because of very poor illumination; floor very dirty; walls marked and becoming dirty; poor selection of food; no trays to carry food to the tables; and floor area much too small.

I am still feeling bitterly disappointed as the articles and pictures had led me to believe that, at last, we were to follow the best foreign methods in comfort, cleanliness, and efficiency. Some day, perhaps, we will!

Yours faithfully,
G. RICHARD PARKES

Continuous Brakes for Freight Trains

13, Highland Avenue, Hanwell,
London, W.7. September 27

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I regret that apparently I did not make a clear point in my previous letter, published in your August 20 issue, in which I remarked that there was no case from a shunter's point of view for *substituting* the continental practice of completely fitted trains for the U.K. practice of loose-coupled side-braked trains, with special reference to hump working.

With regard to side brakes on our fitted wagons, as I am not unaware of their existence, I would further point out that there are at least three types in circulation, a variety which seems to indicate some uncertainty as to the best combination. There are the usual long levers; there are also short "buckle" handles working on a ratchet; and on heavier vehicles, there are screw hand wheels, the latter two types not being suitable for regular hump working.

The matter has presumably never required standardisation, because as far as Western Region goes (and probably in other regions), vacuum-fitted trains are not "humped," but are few enough to be specially dealt with in flat sidings, as at Severn Tunnel Junction, and the question of braking them does not arise.

The fitted vehicles which do pass over the humps are infrequent enough for the screw shackles and hand brakes to be individually watched by hump shunters, but a full train-load could not be humped satisfactorily under present arrangements.

Incidentally, I am not disputing that couplings probably present the bigger difficulty.

Yours faithfully,
J. D. M. PARKER

The Oerlikon Gyrotractor

60, Mount Park Avenue,
South Croydon. October 11

To the Editor of The Railway Gazette

Sir,—I have read with interest the account of the Oerlikon Gyrotractor on page 410 of the October 8 issue of *The Railway Gazette*. Although this vehicle is intended primarily for journeys of several miles without picking up current *en route*, it seems to me that in part the flywheel principle has been incorporated already in Mr. Raworth's electric locomotives on the Southern Region. Here, of course, the flywheel is provided to "keep things going" while crossing gaps in the conductor rail. I wonder if there is available any information as to how far these Southern Region electric locos can travel on the energy provided by the flywheel.

Yours faithfully,
RICHARD J. DEACOCK

Shorter Trains and More of Them

Elwyn's, Felsted School,
Essex. October 3

To the Editor of The Railway Gazette

Sir,—I was very interested to read your articles on "Shorter Trains and More of Them" in the July 16, August 27, and October 1 issues. It would be a great progress if departures could be organised all over the day. I do not agree, however, that every Anglo-Scottish express should take 8 hr. 10 min. on the Kings Cross-Edinburgh run, and stop at Grantham, York, Darlington, Newcastle, and Berwick. Indeed, practice has proved that non-stop services pay at certain times in the day.

In my opinion, at least two daily high-speed non-stop or limited-stop services will be necessary on both the West Coast and East Coast routes. These could leave Euston and Kings Cross simultaneously at 10 a.m. and 4 p.m. and run to Edinburgh and Glasgow in 6 hr. with or without stops at Carlisle and Newcastle. Supplementary fees could be charged. Of course, such trains should be worked by special sets, with cinema coach and observation car, and hauled by diesel-electric locomotives.

I find, too, that you did not push your argument to its logical conclusion. "Shorter Trains and More of Them" is not a reason to build smaller engines, but rather to build no engines at all. Hourly departures will be worked in the best way by multiple-unit diesel-electric trains. Railway officials are still far too conservative and think in terms of "engines and carriages" instead of thinking in terms of "trains."

Inter-regional co-operation will be achieved best by merging all services serving a certain area into one main-line station. Why not build a new station on the present site of Kings Cross and St. Pancras to deal with all the passenger traffic passing at present through Euston, Marylebone, St. Pancras, and Kings Cross?

Yours faithfully,
F. E. LAMOND

9, Ballard's Green,
Burgh Heath, Surrey. October 5

To the Editor of The Railway Gazette

Sir,—I have read with great interest and general agreement your articles entitled "Shorter Trains and More of Them," July 16, August 27, and October 1 issues. In the third article I could not follow the argument that it was undesirable to restore the pre-war 2 hr. and 1 hr. 55 min. schedules from Euston to Birmingham because of the difficulty Great Western engines used to experience in running from Paddington to Birmingham in two hours.

It would appear that the physical characteristics and operating conditions of the two routes are dissimilar. The Great Western route has severe gradients for high-speed services, it has numerous service slacks in awkward locations such as Old Oak West Junction, High Wycombe, Ashendon Junction, and Leamington, and its trains are generally heavy, conveying coaches for Birkenhead and North Wales in addition to those for the Black Country. Yet the 2 hr. schedules were adhered to, even if by dint of very hard work. Furthermore, the G.W. authorities had provisional schedules in which it was visualised that trains limited in weight to 300 tons and hauled by "King" class locomotives would reach Birmingham in 1¾ hr.

Surely, therefore, present-day London Midland engines working over the Euston route with comparatively no severe gradients (except Camden Bank) and with practically no service speed restrictions might well convey a moderate load to Birmingham in 2 hr., thus affording a service which was much appreciated before 1939.

I found myself in full agreement with your correspondent, Mr. A. Kiely, in the October 1 issue, who pleaded for some education in foreign languages for railway staff dealing with Continental visitors at our ports. The contrast between the knowledge of our language displayed by Continental ships, ports and railway staffs and the absence of any linguistic ability by our own has long been marked, and may have lost us many visitors from the Continent.

Yours faithfully,
J. E. ANDREWS,
Lieut. R.A.

Locomotive Fuel Economy

16, Glenmore Road,
London, N.W.3. October 12

To the Editor of The Railway Gazette

Sir,—In my original letter, in your issue of September 17, there were no "errors" such as Dr. Tuplin suggests (in your issue of October 8); these arise from his own rather too narrowly pedantic view of this essentially broadly practical subject. Apparently he did not notice my explicit reference to the need for expansive utilisation of high-pressure steam, and "other things being equal" (obviously, I thought) referred to operating conditions. However, to clear up the misunderstanding on his part, it may be observed, again, that to achieve improved overall thermal efficiency by increased boiler pressure (in new steam locomotive designs) it is, of course, necessary to utilise the higher pressure steam effectively by adopting a greater ratio of expansion than with lower pressure steam. Dr. Tuplin is just as correct in stating that no improvement in efficiency is achieved simply by providing a higher steam pressure, and not making full use of it (by only using it with inadequate expansion, exactly as lower pressure steam), as he would be in stating that a steam locomotive produces no power when it is standing still. If, however, he really thinks that responsible engineers need to be told that it is necessary to provide detail improvements in engine design as well as greater expansion with high steam pressures, then it would appear that either he is some forty years behind the times, or he is attempting to arrogate to his exclusive wisdom common knowledge on which successful practice has been based for many years.

It is quite impossible, even in far too lengthy a letter, to mention all relevant premises and details that in such matters as this normally may be taken for granted. Consequently, one always may be shot at by the clever critics who are more concerned to display their brilliance in correcting invented or imagined "errors" than to contribute constructively to progress.

Yours faithfully,
R. OPIE

Are Timetables Really Necessary?

French Line, 20, Cockspur Street,
London. October 14

To the Editor of The Railway Gazette

Sir,—For nearly 18 months I have had to go to Glasgow every three or four weeks, travelling north by "The Royal Scot" on Sundays, and coming back by the same train on Tuesdays.

Not once during that period has "The Royal Scot" been on time; most of the times the delay was above half-an-hour. On the 10th of this month, we reached Glasgow 1 hr. 55 min. late, and on the way back on the 12th we arrived at Euston 35 min. late.

Nobody will begrudge the urgent necessity of maintaining the permanent way, but as these repairs are planned long beforehand, their reaction on traffic can be gauged to a split second. Why therefore should not these facts be taken into consideration when drawing up timetables, in accordance with prevailing conditions?

Under present circumstances, it is impossible to plan a trip with train connections *en route*, for, when boarding a train, one feels that the times advertised are not true and that our implicit trust for the timetable has been killed. Whatever may be the cause of the present situation, it shows an utter disregard of the public. But as everybody knows, the public is not worth a tinker's cuss.

It is why I should be inclined, Sir, to respectfully suggest that instead of publishing heavy and expensive timetables, some Regions would be better advised to mention starting time only, with a footnote reading like this: "By the Grace of God, the state of the track, the quality of coal, and the goodwill of all persons concerned, this train will reach its destination at least twelve hours after leaving."

So everybody would know what to expect, and trains would not be filled by despondent, angry, infuriated, or very weary passengers.

Yours very truly,
P. DE MALGLAIVE

The Scrap Heap

Lineside Allotments

Railwaymen of the London Midland Region of British Railways working in their spare time on 20,000 lineside allotments, are producing vegetables to the value of a quarter-of-a-million pounds annually. They are reporting record potato crops, sometimes as much as 40 per cent. increase a sowing over last year. Lineside allotments of the L.M.R. cover 1,233 acres split up into 10-pole plots, which are rented to railwaymen at a nominal rate for growing vegetables only.

* * *

100 YEARS AGO

From The Railway Times, *Oct.* 21, 1848

A Remedy proposed for the Present Depression.—A large body of influential railway proprietors at Liverpool and other place are getting up a memorial to the Directors of the London and North-Western and Midland Railways, suggestive of the best means of restoring confidence and remedying the present depression. It is being circulated and signed on the Exchange, and strongly urges on the attention of Directories the following important points:—That the capital accounts shall be closed as soon as possible; that all outstanding accounts of the legal advisers shall be examined and paid off; that the engineering expenses shall be placed on the most economical footing; that the expenses at present being incurred in enlarging stations be limited, and that no such further expenses be incurred without the sanction of a majority of the shareholders; also, that no further engagements, whether contracts for new lines, the Bills of which have been sanctioned by Parliament, and contracts for works not let be entered into without such sanction. That the rates of fare and tolls of all kinds, not productive of a fair remuneration to the shareholders for the outlay and risks, be raised at once, and where Parliament has limited the powers of raising such rates and tolls, that application be made next session to enable the Directors to raise them to a remunerative scale. That the number of trains be reduced as far as practicable; that the express trains, except one per day at an increased rate of fare, be taken off; and that first, second, and third-class trains be run separately, at a speed in proportion to the amount of fare paid. That the Boards of Directors be reduced; that one-third retire annually, and that the new Directors be proposed by the proprietors, and not chosen by the Board.

The late Mr. George Stephenson.—The London and North-Western Railway Company have resolved on erecting a marble statue from the chisel of Mr. Gibson, to George Stephenson, the late eminent civil engineer, as the author of the improved locomotive, and promoter of the great railway system, twenty years ago. [We hope that a conspicuous position, in the court-yard of the London terminus, for instance, will be given to the appropriate memorial.—Ed. *R. T.*]

A Meal in a Train

On the evening train from Exeter to Waterloo on October 13, three dinners were served, two between Honiton and Salisbury and one afterwards. Dining-car attendants urged passengers to take a meal, with a glass of sherry beforehand, saying: "There's plenty of food on the Southern." Such is the value of publicity.—*E. G. Inwood, in a letter to "The Times."*

* * *

Seating Problem

Trouble on the crowded "Flying Scotsman." . . . An angry passenger in the first-class restaurant car refuses to leave the table after tea. "I've paid for a seat on this train and I mean to have one," he says.

In vain the attendant explains that the second sitting wants to take tea. The passenger is adamant.

"Well," says the attendant, "if I find you an alternative seat will you accept?"

Two minutes later the passenger was happily sitting on an upturned beer crate in the corridor.—"*John Bouverie's Journal*" *in the* "*News Chronicle.*"

* * *

Tickets, Please

"A little ingenuity and artifice" were among the subjects which Mrs. Malaprop held to be essential to a young woman's education. At least one young man, of whom news came lately from Lucknow, has learned them thoroughly. In the sacrilegious disguise of a ticket-collector he gathered fares from a number of fellow travellers who had no tickets. By ill luck he was challenged, exposure followed, and he was found, by way of insult added to injury, to have no ticket himself. Many and sonorous charges were brought against him—cheating, impersonation, and obstruction—and he was sent to languish in a gaol for thirty-two days and pay a fine of fifty rupees. It seems at first sight a little hard on one who had thus broken fresh ground in the annals of crime with a pleasant sense of humour.—*From "The Times."*

* * *

He Travelled 250,000 Miles by Train

Inspector Harry Edwards, well known in the Western Region of British Railways from Paddington to Penzance, Fishguard, and Birkenhead, had travelled by train the equivalent of ten times round the equator when he retired on October 18 at the end of 48 years of railway service. For the past 20 years he was a Head Office Inspector, responsible to the Superintendent of the Line at Paddington Station for arrangements in connection with the working of parcels services throughout the system. Before that he was stationed at Wrexham, where he took an active part in public affairs and was elected a J.P. and County Councillor for Denbighshire. Mr. Edwards is a keen gardener, and in his retirement hopes to find plenty of time for his hobby at his home at Langley, Bucks.

* * *

Noiseless Tour

An air-conditioned state railway coach with a telephone is being built in Australia for the King and Queen's tour of Victoria. The railway department in Victoria already has two state coaches, but one was built in 1890 and has not been used for a long time and the other dates back to 1912. No rhythmic noise of wheels will disturb the King and Queen as they speed through the state. The coach will be sound-proof. It will have two rooms, two bathrooms, cabins for a small staff and a kitchenette. There will be panelling in Australian wood. Princess Margaret will have a separate coach. Hers will be borrowed from the South Australian railways.—*From "The Star."*

* * *

Spotters Shouldn't Miss

Johnny Jones, a schoolboy bold,
Spent his spare time "spotting,"
Used up pencils at a rate
Little short of shocking.

During days from off the school
Rose he from his slumbers,
Then sat upon the railway bank
Noting engines' numbers.

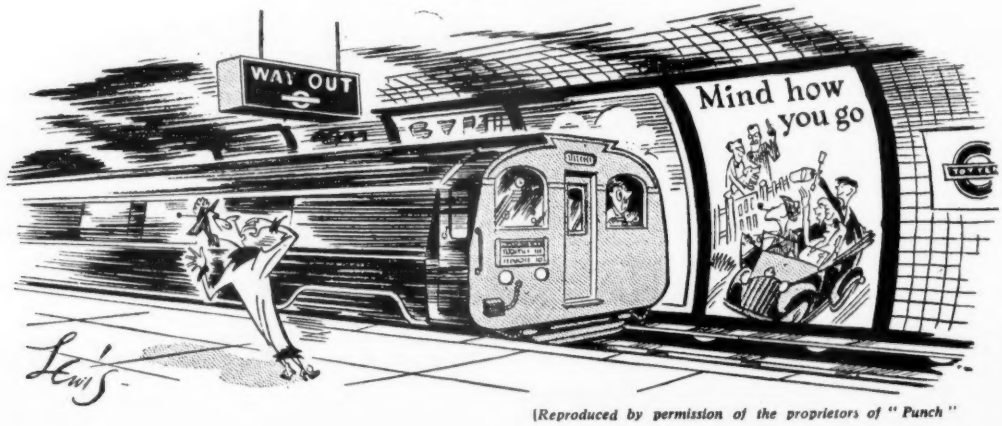
When on holiday one month
In the Eastern Region,
Thought he would add to his list,
Engines there being legion.

Then there grew a rumbling sound,
'Citement was terrific,
Round the bend came famous train
Hauled by blue Pacific.

This was something new to John,
Engine royal blue colour?
He was used to engines black.
Some were even duller.

In amazement he was lost,
Brain refused to function,
Didn't get the number down;
Shades of Tamworth Junction!

R. M.



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OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

SOUTH AFRICA

Germiston Station Improvements

Germiston, the most important junction on the Reef, handles about 700 trains a day and deals with intensive suburban traffic between Johannesburg and the East Rand and Pretoria. Work has been going on for some time to improve the accommodation, but progress is being hampered by the continued shortage of materials. Lack of sufficient platform accommodation is the main obstacle to the expeditious handling of traffic.

The work at present in hand consists of the erection of three new island platforms, one new single-face platform on the north side, and the provision of eight passenger lines through the station. On the north side will be located the main-line island platform, 50 ft. wide and 1,620 ft. long. It will include two bays into which Pretoria coaches can be shunted while waiting for connections.

At the eastern end of the station will be built a special non-European station building and a dock platform for non-European trains. As Germiston is a through station, access to all platforms will be provided by subways, two of which will be for luggage only.

The third island platform already has been completed and brought into service. The four platforms on this island, with Nos. 17 and 18 on the single-face platform to the north, will deal with all eastbound traffic on the suburban lines from Johannesburg to Pretoria and the East Rand.

EAST AFRICA

Mombasa Traffic Possibilities

In a paragraph with the above heading which appeared in our July 30 issue incorrect figures for the total tonnage handled at Mombasa Port in 1939, 1946, and 1947 were given. The figures should read: 1,193,027 (1939); 1,544,967 (1946); and 1,918,483 (1947).

RHODESIA

Discussions on Beira Port

Sir Arthur Griffin, General Manager of the Rhodesia Railways, has returned to Bulawayo from London where he had discussions with the board of the Beira Railway concerning the working of the Beira Port and railways as from January 1 next, on which date the Portuguese Government intends taking over the control and working of the port.

Talks with various British Government departments also were held. In an interview Sir Arthur Griffin said their main consideration had been to avoid the dislocation of the hitherto long-standing, efficient, and integrating working of the Beira port and the Beira Railways. This was of extreme importance now, when all resources available had to be used to the maximum extent to maintain exports of such primary commodities as copper and chrome. It was felt that the Beira Railways had to be regarded for some years as an essential element of the transport system of the Rhodesias. Sir Arthur Griffin said: "We are aware that the Portuguese Government is as anxious as we are that the outlet of Beira should be run as efficiently as possible. Not only does the economy of Rhodesia depend on this, but the well-being of Beira also, which, is, of course, a main consideration of the Portuguese. Considering everything, I think we have made considerable progress. I am hopeful there will be a successful outcome eventually to these negotiations, and we shall be able in the future to work in Beira and Portuguese East Africa in harmony with our Portuguese friends as we have done in the past."

Wagon Control Committee

As a result of recent talks between a Northern Rhodesian delegation, headed by the Governor, and the Southern Rhodesian authorities, a joint traffic committee is to be set up to advise on allocation of railway wagons for distribution of essential commodities, and to keep both governments informed of possible future demands. These talks were the outcome of a sudden shortfall in coal deliveries from Wankie to the copper mines which resulted in a temporary closing down of some mines. Some months ago it was stated by Northern Rhodesia Government officials that copper has first place from the point of view of United Kingdom supplies as compared with chrome.

The new committee will have the Minister of Mines of Southern Rhodesia as Chairman, and will include the Economic Secretary of Northern Rhodesia. It is understood that it will be empowered to advise the Wankie collieries on relative priorities of the claims of various consumers in relation to the number of trucks placed at the collieries' disposal by the railways.

PAKISTAN

Conversion to Oil Burning

Inadequacy and uncertainty of Indian coal and high cost of importing coal have necessitated a programme of conversion of locomotives to oil burning. On August 15, 1947, the North Western Railway had 90 oil-burning locomotives; the total has now reached 142.

New Locomotives and Coaches

Twenty-six broad-gauge locomotives have been ordered for the Eastern Bengal Railway. Old broad- and metre-gauge coaches are being replaced gradually. For the North Western and Eastern Bengal railways 100 broad-gauge coach bodies and 125 metre-gauge coaches have been sanctioned. They will be bought abroad, and will provide more amenities for lower class passengers.

CANADA

Serious Fire at Winnipeg

Investigation is being made into a $225,000 fire which swept the yards of the Arctic Ice Company at Winnipeg on September 6, and destroyed a 400-ft. section of the Canadian National Railways' main line. The ice company's loss is estimated at approximately $100.000. Railway officials said their loss was approximately $125,000. The fire necessitated the rerouting of all C.N.R. traffic between Winnipeg and points west pending repairs to a railway trestle carrying two main lines and two auxiliary lines.

Canadian Pacific Earnings

The Canadian Pacific Railway has reported an increase of $650,665 in August net earnings over the corresponding month of last year, at $1,912,743, as compared with $1,262,078 in 1947. The improvement resulted from an increase of $4,332,329 in gross earnings to $30,941,857, against $26,609,528. The expenses amounted to $29,029,114, as compared with $25,347,450, an increase of $3,681,664. The cumulative total for the eight months showed gross earnings of $221,588,445 as compared with $205,155,813 in 1947, an increase of $16,432,632. Working expenses amounted to $218,074,293 against $195,513,322, an increase of $22,560,971. The net earnings decreased by $6,128,339 in the eight months, amounting to $3,514,152 as compared with $9,642,491 a year ago.

NEWFOUNDLAND

Railway Strike

Railwaymen have gone on strike to enforce a demand for a 15 cents (9d.) an hour wage increase. The Government had offered an increase, first of 5 cents, then of 7 cents, which was rejected by the unions. If it lasts, the strike will cause hardship to inhabitants of remote districts, already facing the winter blockage of roads.

UNITED STATES

Burlington Seeks New Freight Route into St. Louis

The Gulf, Mobile & Ohio and Chicago, Burlington & Quincy are discussing a plan whereby Kansas City—St. Louis freight trains of the Burlington company would be diverted from their present circuitous route, over the G.M. & O. lines between Rock Creek Junction to Francis, thence over the Burlington's own metals into St. Louis. The proposed plan would involve extensive improvements to parts of the line, including the laying of heavier rail and installation of centralised traffic control. It will be recalled that, as reported in our issue of October 1, the Interstate Commerce Commission denied a joint application by the Burlington and the Santa Fe companies for outright purchase of the section concerned, over which the Gulf, Mobile & Ohio then would have running powers only.

ARGENTINA

Special Rates Suppressed

As from September 30 last, all preferential special rates such as those for sports clubs, soldiers and sailors in uniform, clergymen, delegates to conventions, commercial travellers, and so on, have been cancelled, as also those for three-monthly, six-monthly, and yearly season tickets. Competitive rates between railways also have been abolished with the exception of a few which have been left in force temporarily to avoid disruption of the flow of traffic. These interim measures form part of the general plan at present under study for the rationalisation and co-ordination of rates.

ITALY

Large Wagon Order for Germany

Recent negotiations between American occupation authorities and delegates of the Italian wagon-building industry at Frankfort have resulted in an order for 4,500 goods wagons to be supplied by Italy to the Reichsbahn within the framework of the European Recovery Programme up to June 30, 1949. At current prices the value of the order is lire 10,000,000,000, equal to $18,000,000. The financial clauses provide for the granting of $3,000,000 at the conclusion of the agreement with subsequent $3,000,000 instalments every two months. The first

batch of 200 wagons is to be delivered in January, 1949.

Four thousand of the wagons are to be built in northern Italy, and the remaining 500 in southern Italy. According to a statement made by the Italian Minister of Transport in connection with the above order, the Italian engineering industry is now assured of a period of at least six million working days covering both this order and previous orders placed by the Italian railways. The Minister stressed the possibility that important new orders might follow if the present order were fulfilled in accordance with the terms, as he estimated that about 200,000 wagons were required to place European railway transport again on a sound basis. This meant about 50 per cent. more than the total owned by Germany before the war. The Minister concluded by foreshadowing an order for 1,000 wagons from France within the E.R.P. scheme.

Milan Underground Projected

An underground railway at Milan totalling 12½ route-miles is being contemplated. It would take five years to complete, and the expenditure involved, inclusive of the cost for the rolling stock (73 coaches) has been calculated at lire 34,000 million, about £22,600,000.

GERMANY

Hungarian-Built Wagons Ordered

Hungary will manufacture 900 goods wagons for the bizone of Germany under a contract signed recently. The purchase price for the equipment is 2,250,000 dollars. Deliveries will begin in January, 1949, and take six months.

The purchase forms part of a large programme to expand the rolling stock of the German railways within the Marshall Plan. Twelve thousand goods wagons on order with German rolling stock producers in the bizone are to be delivered at a monthly rate of about 1,750. They are of two types with a loading capacity of 20 and 26½ *tonnes* respectively, developed during the war, and they are stated to have proved highly successful in operation.

As it is considered that the railways are in need of 100,000 new wagons, and the contracts already placed almost exhaust the capacity of domestic manufacturers, many of the wagons required will have to be obtained from abroad. Conclusion of the contract with Hungary was preceded by the placing of orders abroad for about 9,000 goods wagons, of which Czechoslovakia is to deliver 3,480. Delivery is to begin at once and to be completed by June, 1949. A further 1,090 wagons will be delivered by Austria between January and June next; Italy is to provide 4,500 before next autumn. The prices for the wagons abroad range from 3,500 dollars for the larger type to 4,000 dollars for the smaller type. A total of 63,500,000 dollars has been earmarked under E.R.P. for these orders placed with foreign firms by the German railways.

AUSTRIA

Increase in Railway Traffic

Railway traffic in Austria has been increasing steadily since 1947, when the coal crisis and the shortage of locomotives began to be overcome. The greatest handicap now facing the Federal Railways is shortage of goods and passenger rolling stock. Despite this handicap they have been able to cope with a greatly increased traffic. Goods traffic, in train-km., was, in July last, 106 per cent. of the monthly average for 1937. In the same month the total of net ton-km. corresponded to 147 per cent. of the monthly average in 1937. Passengers conveyed during the first half of the current year exceeded by 28 per cent. the total in the comparable period of 1937.

Accounts for 1947 closed with a deficit of Austrian schilling 512,000,000. Investments totalled 217 million schilling. Pensions at 234 million schilling were a heavy burden. Mounting costs all round have been responsible for the doubling in goods traffic costs as expressed in units of gross ton-km. The policy of reducing staff and personnel brought their number at the end of 1947 to 9 per cent. lower than twelve months previously.

New Road Goods Service

In their attempt to lower the cost of transport between Austria and the Rhine ports on the western seaboard of the Continent, the Federal Railways have organised a road goods service between Bregenz and Strasbourg, crossing the French zone of occupation in Germany. The new arrangement, which became operative as from September 15, means that the Austrian exporter using this route is able to save a considerable portion of the freight payable in foreign currency.

On the route through Switzerland, with transhipment at Basle, not less than 53 per cent. of the freight has been payable in Swiss francs, and the railway route from Passau to Aix-la-Chapelle entailed the payment of 75 per cent. of the total freight in U.S. dollars. The new route through French-controlled German territory means that the part of the freight payable in foreign currency (French francs) is reduced to 15½ per cent. In addition the new arrangement provides for the freight on the Rhine portion to be payable in Austrian schilling. A further advantage to the Austrian exporter is that he will now be able to offer his goods free on board Rhine port—Rotterdam or Antwerp—and thus strengthen his competitive position.

Publications Received

Signale und Stellwerke (Signals and Signal Boxes). By Eduard Felber. Zurich: Orell Füssli Verlag. Swiss Federal Railways Primers, No. 4. 80 pp., 8 in. × 5 in. 51 illus.—This is the fourth of the excellent series of popular books on railway engineering and operation issued by the Swiss Federal Railways, the preceding volumes, reviewed in our columns, covering locomotives, stations, and generating plants. The author is well known to many signal engineers and operating officers in this country. With the aid of an excellent selection of photographs and a few diagrams, he contrives to convey to the non-technical reader a complete and clear general account of the principles of signalling, with special reference, of course, to Swiss practice, and the working of the various devices by means of which they are carried into effect.

The author begins with the well-known mechanical signals; touches on light signals—standard for all new work and replacements; and then interlocking, point operation, locking frames (mechanical and power), track circuits, axle-counting, block apparatus, automatic train control, and remotely-controlled locations, such as the very interesting double-crossover layout in the Gotthard Tunnel, recently described in these pages.

The signalling equipment used in Switzerland presents several interesting features, and the book should find many readers in other countries desirous of obtaining a general idea of what has been done by Swiss engineers in this field. A French edition no doubt will appear in due course, as in the case of the earlier volumes in this attractive series.

The Timber Industry in Germany During the Period 1939-45.—An overall report compiled by the British Intelligence Objectives Sub-committee and issued by H.M. Stationery Office: 16 pp. 9½ in. × 6 in. Price 6d. This report is actually eight separate brief reports on the following subjects: (1) Composite wood manufacture, (2) wood bending, (3) pencil manufacture, (4) wood structural research, (5) logging, lumber and wood products machinery and equipment, (6) German wood preservatives other than coal tar creosote for the war period, (7) coal tar creosote for wood preservation during the war period, and (8) chemistry of wood and wood products; each contributed by a research worker of the Forest Products Research Laboratory as a result of his investigations in Germany. Generally, recent developments on these lines in Germany appear to be unimpressive. No really modern plywood or blockboard plant was found, and in this industry technical developments and production methods were far behind our own. Bending and moulding ply and laminated wood, however, had been developed considerably. None of the pencil factories visited was working, because of bomb damage. In the structural field, no important developments emerged during the war period. Power logging machinery had not been developed nor had labour-saving devices in mill and factory. There was no mass production of machinery or tools except for portable tools. Before the war creosote was used for 90 per cent. of the wood-preservative needs, but was absolutely restricted during the war, and water-borne preservatives such as Wolman salts were substituted.

Kathanode Batteries.—We have received from the D.P. Battery Co. Ltd., Bakewell, Derbyshire, one of the oldest firms in this country exclusively engaged in the manufacture of storage batteries, a new brochure illustrating by photographs and sketches the application of Kathanode batteries to many types of vehicles, including industrial trucks and locomotives. Among the illustrations is a photograph of L.M.R. main-line diesel No. 10000, which includes in its equipment 120-V. 236 amp.hr. D.P. Kathanode diesel traction batteries, and as a contrast a veteran battery-driven L.M.S.R. diesel shunting locomotive in which a Kathanode battery installed 20 years ago is still in regular service.

Ratchet and Screw Jacks—The Consolidated Pneumatic Tool Co. Ltd., 232, Dawes Road, London, S.W.6, has issued a new illustrated catalogue of Duff-Norton jacks. All the jacks in the extensive range are described, with details necessary to assist the prospective user in selecting the type suitable for his requirements. Lifting capacities vary from 3 tons up to 100 tons, and cover load heights from 7 in. to 72 in. The jacks are of the ratchet, screw, hydraulic, and air-operated types, and provide for every type of lifting service. A complete index is included in the catalogue, and in addition there are references to the pages of particular interest to different industries.

Speed Control Signalling Surveyed

Methods of increasing line capacity by regulating signal aspects according to the speed of trains

(From a Correspondent)

THE description in *The Railway Gazette* of June 4 of the speed signalling to be adopted on the Piccadilly Line of London Transport between Green Park and Kings Cross prompts a survey of the function of such signalling, the places at which it may best be used, and the methods of operation of the various systems of obtaining speed control from the signalling.

Speed control signalling properly can be applied only to lines on which automatic train stops are fitted; this, added to its main function of increasing line capacity from 40 to a possible 50 trains an hour, limits its use to rapid transit railways. On these railways an essential feature of the automatic signalling is the "trip overlap," which is the distance beyond a signal which a train must be before the second signal behind it will clear. This distance, generally 140 yd. on London Transport lines, is the distance in which a train can be stopped from normal full speed by the action of the train-stop. Its inclusion in the signal spacing is necessary since the tail of a train is not positively protected by a signal unless it is more than 140 yd. in advance of that signal.

On conventional automatic signalling installations, it is general practice to instal —unless special conditions of gradient, etc., otherwise determine—a signal 140 yd. in the rear of a station; a train thus can approach its predecessor as closely as this should station time be rather long (as often happens in peak hours at certain London Underground stations). This signal will not clear until the train leaving the station is 140 yd. clear of the signal at the leaving end of the station; the entering train then may draw into the platform, having to do a start-to-stop run of about 250 yd. before, in its turn, it can detrain and entrain passengers. All this takes time, hence line capacity is limited by the flow of trains through stations at which stopping times may be longer than average.

The first means of increasing station capacity has long been in use by London Transport and its predecessors. This was to use a group of three signals at the approach to a station rather than the one just mentioned. Then, the 140 yd. overlap being always maintained, the approach signals cleared successively as the first train left the station, leaving the way clear for the second train to enter. If, therefore, the second train approached the station as the first was leaving, it would not be brought to a stand, since, with three approach signals, the first would clear somewhat earlier than if it were the only one. However, if the stopping time of the first train were long, the second would still be brought to a stand 140 yd. from the station, so its 250-yd. start-to-stop run, on the station becoming clear, would still be necessary.

The only way of reducing the time needed for this start-to-stop operation is to reduce the distance; the previous expedient of employing three approach signals (rather than one) merely enabled the operation to be begun earlier. A method therefore has been developed whereby a train may approach its predecessor by less than 140 yd. providing it is proved to be going slowly. This is done by means of a track circuit of known length, and a timing relay which begins to operate when the approaching train enters the track circuit and ceases operation when it enters the next.

If the train takes more time to traverse the timing track circuit than the operating time of the timing relay, the relay operation will be completed and action initiated. If the train takes less time, then the timing relay will reset and no further action take place. If the train takes more time, it will be going slowly; the length of the timing section and the time of action of the relay are so related that the train speed above which the relay will not operate is the control speed for the signal being approached. If, for instance, the second of the approach signals is about 40 yd. from the rear of the station, then the timing section on the approach to the first of these signals is set for about 15 m.p.h., for which 40 yd. is a suitable overlap.

If the timing relay operation is completed, it proves that a train has approached the first of the approach signals at 15 m.p.h. or less. The timing relay thus may be arranged to initiate clearing of the first of the approach signals, hence result in a train which is moving slowly being allowed to approach much closer to its predecessor than if it moves quickly. Moreover, there is by now more chance that the train in the station will have started moving, so the second, then the third, approach signals, which have overlaps for but 15 m.p.h., may well clear in front of a slowly moving train which would otherwise have been brought to a stand, hence enable even a few more seconds to be saved. By this means a somewhat longer station stop for a given train interval may be obtained, hence, station stopping times being very difficult to shorten further, present off-peak minimum train intervals may be maintained through busy stations during peak hours.

This form of speed control may well be applied, as it is in London, to limiting the speed of trains down steep gradients at the bottom of which are sharp curves. Here, the driver of a train is always met by a red signal, which will remain red until both the track ahead is cleared by the preceding train and the approaching train speed is proved to be below the maximum permitted round the curve in question.

Another way in which speed signalling can be used to increase line capacity depends on the fact that there is an optimum speed for maximum line capacity of trains of given length and braking performance, this being due to "trip overlap" being proportional to the square of train speed, whilst train frequency is proportional to the train speed but inversely proportional to the distance between trains. In general this optimum speed is lower than the customary operating speed of trains, a compromise between capacity and average speed being made in consideration of the wish of passengers for high speeds.

On steep down grades the trip overlaps required, if the maximum possible speeds of trains down these grades need consideration, added to the extra distance required for stopping due to the grades themselves, might well result in reduced line capacity on these grades. If, however, speed control is installed down such grades to limit the speed of trains to that at which line capacity is equal to that on level sections, then gradients will (next to stations) cease to be the limiting factors in line capacity.

A further application of speed control is sometimes used to keep the trains within a maximum speed which is closely equal to the optimum speed for maximum line capacity. By this means, on a line with many radiating branches in the suburbs, high speeds may be obtained from the trains when suburban conditions permit, yet, on the city section, where trains from all routes converge, the maximum line capacity available may be utilised. This application of speed control is operative only when trains are operating on minimum headway, the signals having at least three aspects—"clear," "clear" on speed control, and "stop." By this means maximum train speeds are not reduced to the optimum except when the lines are congested.

One method of operating speed control schemes, by proving train speeds to be below the maxima permitted before clearing the signals, has been described already, being the method already applied, in simpler forms, by London Transport. In the Piccadilly Line installations, described in the June 4 issue, there will actually be five approach signals to each station, rather than three. The first two will clear if their control sections, about 200 yd. in advance, and indicated by "25" and "20" signs illuminated when speed control is operative, are traversed at less than 25 and 20 m.p.h. respectively; the final three signals have reduced overlaps for 26 m.p.h.

Another scheme in use on some American rapid transit lines uses signals with a separate aspect for "speed control clear" by contrast with "unrestricted clear." On such a signal being passed at "controlled clear," a timing relay is started. This relay has a succession of contacts on its moving portion which close after a number of definite time intervals. These contacts lower a succession of train-stop arms placed at various distances from the controlling signal. If a train is proceeding too quickly it will reach a train-stop arm before it is lowered, hence will be stopped; whilst if the speed is below that permitted the train-stop arms will be lowered just before the train reaches them, and the train allowed to continue slowly to the next stop signal.

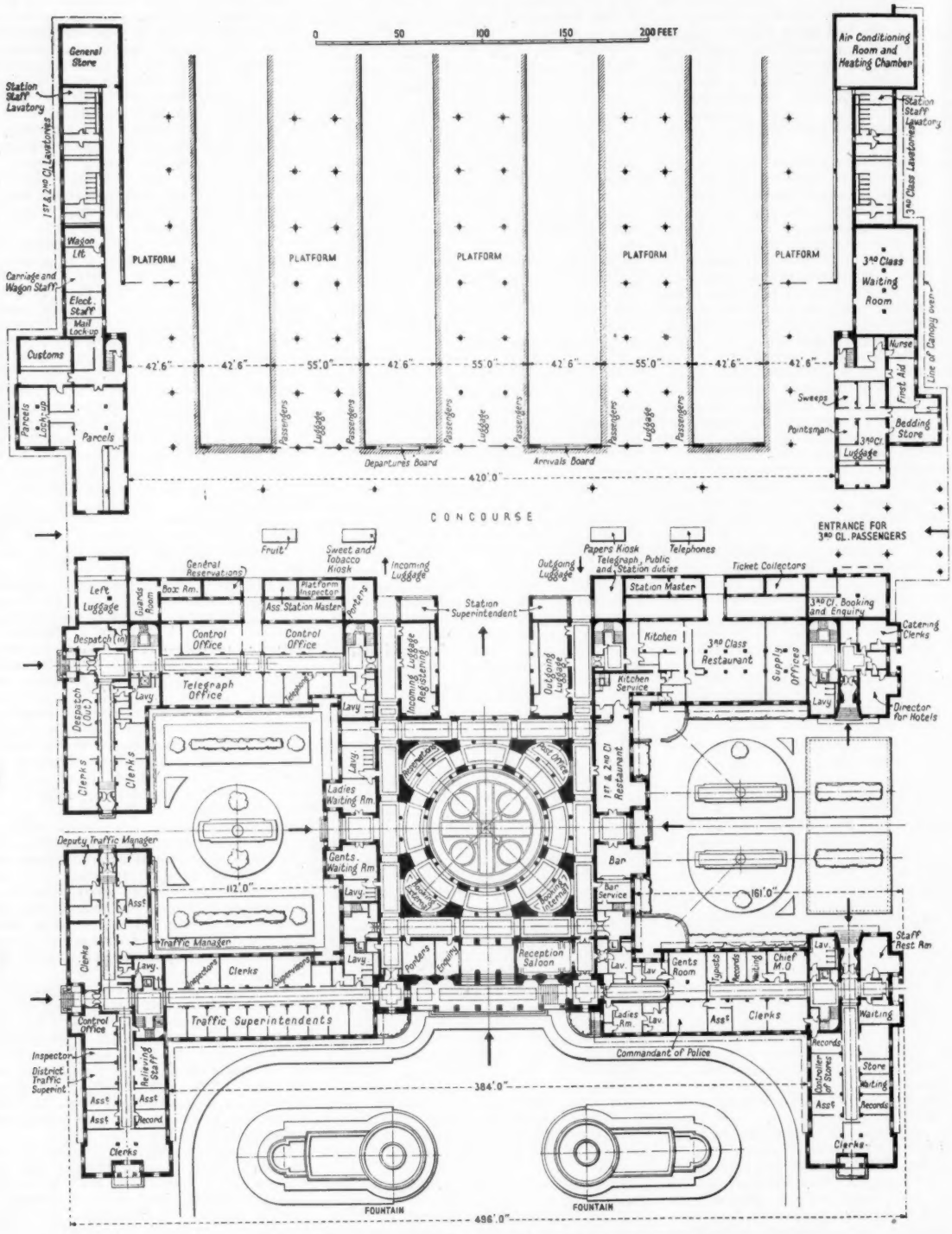
At the approach to a station which is occupied, this scheme is comparable with the London Transport scheme except that the control section succeeds the first approach signal rather than precedes it and clears it, whilst the second and possibly third signals do not exist at such, but only in the form of train-stops released on a time basis by a train passing the first signal.

The advantage of the methods described above is that no extra train equipment is required. A speed control system installed on the New York Municipal Subway about 1914 is added to a cab-signalling device and speed-restriction indicator and arranged to stop the train if the driver ignores its instructions; it does, however, necessitate relatively complex equipment being carried on the train.

On these equipments a transverse row of five buttons projects beneath the car. Ramps at the entrance to each block section lift combinations of these buttons as the car passes. The meaning of this combination of buttons is translated by relays within the car and the relevant speed restriction, etc., appears on the cab signal before the driver. Should the signal be at "unrestricted clear," an energised

(*Continued on page* 477)

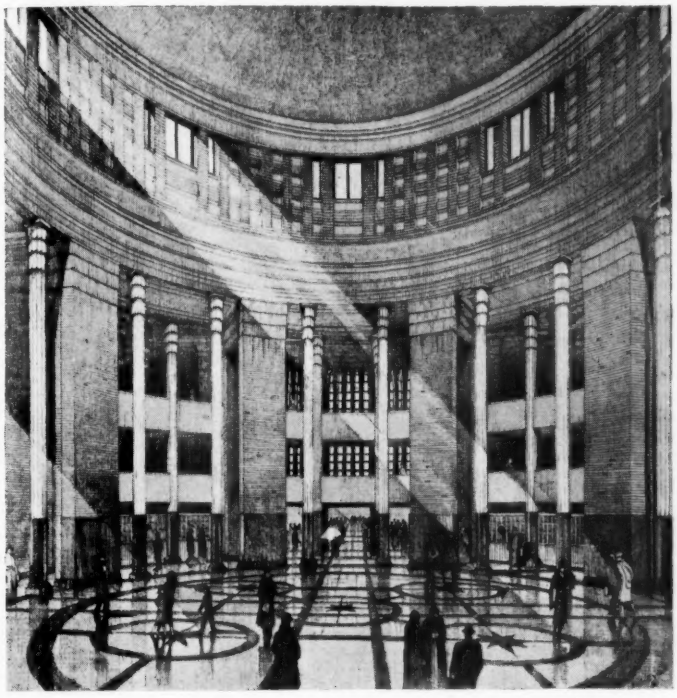
Central Railway Station for Baghdad



Ground-floor plan of the new terminal station for Baghdad

Central Railway Station for Baghdad

A new terminal to combine services now worked from separate stations will be a noteworthy architectural feature of the city



Circular concourse, paved in marble, stone, and granite, with domed roof

AMONG the new projects now being carried out in Iraq, to which reference was made in our July 2 issue, is the construction of a new terminal station in Baghdad. At the present time there are three main stations in the city, being the termini respectively of the international main line from Haidar Pacha (the "Taurus Express" route), the railway from Baghdad to Basra, and the Kirkuk line (now being extended to Erbil as reported in the issue quoted above), which is on the other side of the Tigris. At present the Haidar Pacha and Basra line stations (the West stations) are close together and are being replaced by the new terminus, into which will run also the Kirkuk line when the bridge over the Tigris just above Baghdad is completed, and there will therefore be a great gain in convenience for passengers. Excluding the 70-mile extension from Kirkuk to Erbil, the Iraqi State Railways operate 328 miles of standard-gauge and 638 miles of metre-gauge line.

When the metre-gauge railway from Basra is brought into the new station through running will be practicable between the Kirkuk oilfields, the Erbil grain producing area, and Basra. The foundations of the new station were completed recently, and a beginning has been made with the erection of the superstructure.

The layout of the station has been designed to conform with the town-planning scheme for Baghdad, and there will be a large area in front, free from other buildings and embellished with lawns, trees, and fountains. In this way the architectural merits of the station will be able to make the contribution they deserve to the beauty of the city. The design has been evolved to conform with the best existing examples of railway station architecture in the Middle East, such as those at Haidar Pacha and Ankara.

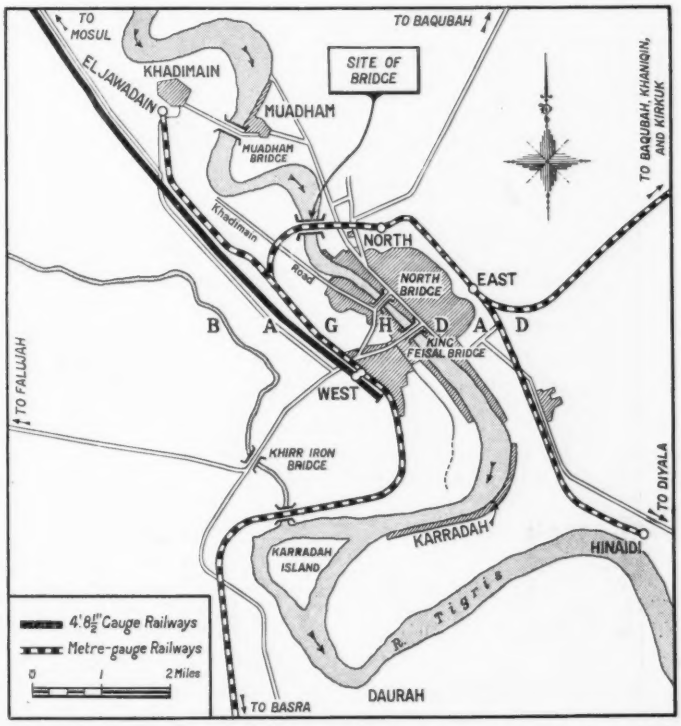
There will be 8 platform lines in the new station, and the remainder of the ground space will be occupied by a concourse under a domed roof and flanked with offices, rest rooms, and waiting rooms. An upper floor will contain board rooms, offices, accommodation for police, and additional waiting rooms.

Local Materials Used

The building is being made from local materials as far as possible, the principal one being a primrose-yellow brick, made in the locality, with white limestone dressings. The main features of the building, which are referred to in an editorial note, will be the extensive concourse, its domed roof having a span of nearly 70 ft., and the two 106-ft. towers dominating the front elevation. In the concourse, the floor will be paved with Sicilian marble, Roman stone, and Belgian granite in traditional patterns. The building itself will cover an area of approximately 245,000 sq. ft.

The architects of the building are Mr. J. M. Wilson, A.R.I.B.A., and Mr. H. C. Mason, F.R.I.B.A.; the quantity surveyors are Messrs. Longdon & Every, F.F.R.I.C.S.; and the general contractor is Holloway Bros. (London) Limited.

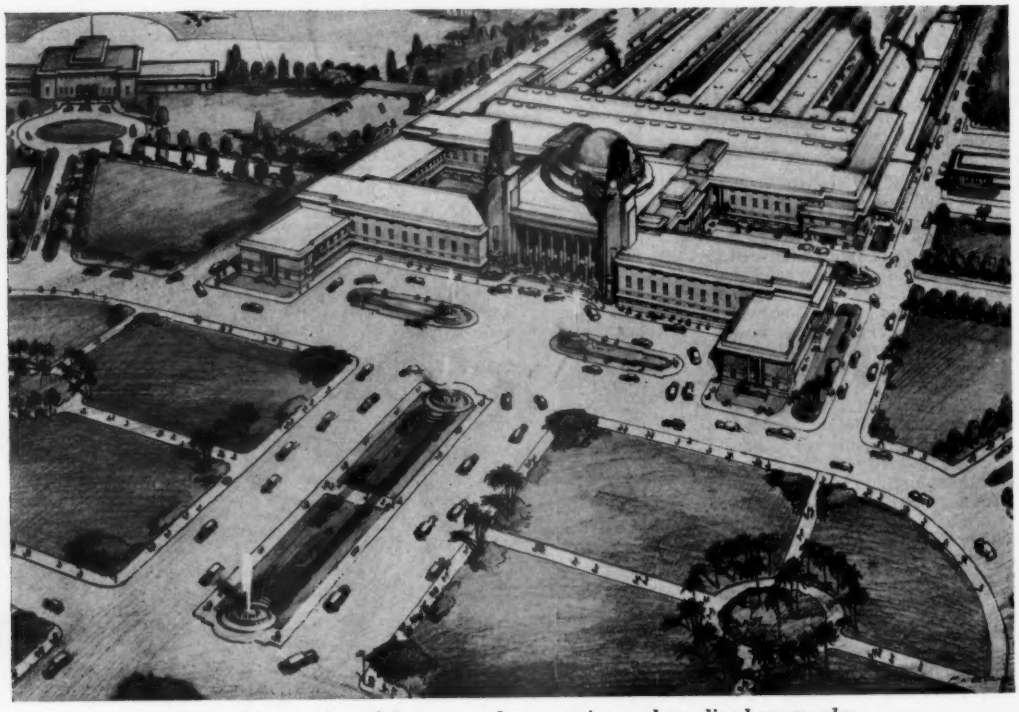
POLAND TO SUPPLY RAILS TO TURKEY.—In accordance with the terms of the trade agreement recently concluded between Poland and Turkey, the first post-war commercial agreement between the two countries, Poland is to supply important quantities of steel rails to the Turkish Railways.



Sketch map of the Baghdad area showing the projected bridge which will enable all traffic to be concentrated at a new terminus on the site of present West stations

Central Railway Station for Baghdad

Front elevation of station, showing dome flanked by twin towers



General impression of the proposed new station and tree-lined approaches

Handling Ocean Passenger Traffic at British Ports

A review of facilities necessary for handling the traffic, with particular reference to procedure at Southampton Docks

Outward-bound Cape cargo at Southampton

AT the present time when British ports are making a major contribution towards increased prosperity, by the expeditious handling of exported and imported goods, it is opportune to consider the like importance of their passenger traffic. Figures published in a recent issue of *The Dock & Harbour Authority*, show that for the period January to September, 1947, the number of passengers by sea from United Kingdom ports to the European Continent was 1,043,690, and to places beyond Europe, 173,568. During the same period, disembarkations at United Kingdom ports were 1,060,462 from Europe, and 136,913 from the rest of the world.

It is pointed out that regular passenger traffic to and from Great Britain is concentrated on a comparatively few specialist ports. Some responsibility for this situation is to be found in the fact that a passenger port ideally is situated close to an area of dense population, and further, that as unnecessary steaming in home waters should be avoided, it is desirable to establish an ocean passenger port near to the recognised trans-ocean routes. A part also has been played by such matters as the size of the port, and the amplitude of the general facilities it provides, as well as tradition and long usage.

Facilities Required

A necessary feature at a port handling ocean passenger traffic is a deep-water berth for every vessel. Preferably, the berth should be situated alongside a tidal quay, pier, or landing stage, though not within enclosed docks, as time occupied in waiting for a passage through dock gates may interfere with arrival and departure schedules.

Between the edge of the quay and the various buildings, provision should be made for two railway tracks for cargo work, and for crane tracks, bollards and capstans. Operations are facilitated by laying the various railway tracks flush with the quay and by sufficient provision for cargo handling.

A fairly common feature of passenger quays is a dual-purpose main-building, which incorporates both the usual characteristics of a transit shed and special subdivisions for passenger handling. These sub-divisions comprise the steamship company's shed office, with arrangements for ticket collecting, an immigration department control room, a section for baggage examination by H.M. Customs, and a passenger's waiting room. A platform situated at the rear of the shed is used by the railway, for the accommodation of specially-worked boat trains, or through coaches.

"Queen Mary" passengers

Embarkation Procedure

Following the arrival of a boat train at the embarkation shed, the vans are unloaded by baggage porters, and passengers are directed inside the shed, according to their ship and class of travel. The passenger passes into a waiting room preparatory to entering a partitioned office staffed by steamship agents' booking clerks, where cabin cards are issued in exchange for steamship tickets. In another office, immigration officers check passports and note-currency, and should no further interrogation be required, permit the passenger to proceed to the customs examination hall. Baggage is checked individually with each passenger by the customs officer, and later is loaded onboard. The passenger is then directed up the ship's gangway and so to his cabin.

In the same way that it is necessary to place a number of barriers between the passenger and the ship before embarkation, the returning traveller must be prevented from reaching his car or train, before he has passed through the proper procedure. As the same shed has to be used for both inward and outward bound traffic, it is imperative that the layout can be adapted easily to either requirement, and yet prevent any unauthorised movements by the passenger.

The problems of layout and design arising from these dual movements, often are solved at smaller passenger ports by using mobile barriers, benches and signs, though at larger passenger ports, complete two-way designs are a permanent feature.

Southampton Docks

A notable example of a port with most extensive passenger facilities is at Southampton, where the dock authority is British Railways, Southern Region. Figures show that before the war, Southampton dealt with 47 per cent. of the United Kingdom ocean passenger traffic, as well as between two and three hundred thousand travellers to Havre, St. Malo, and the Channel Islands, and some 73,000 cruising passengers.

The Southampton docks are provided with over twenty passenger and cargo sheds and have open berths, the deepest of which has some 40 ft. of water. A number of other berths have 34 ft. and 32 ft. of water, and the shallowest has about 18 ft. at low springs, with a rise to 31 ft. at high springs. The berths are directly served by boat trains and from Southampton airport there are air services to parts of England, Scotland and Ireland.

The marine air-terminal recently opened at Southampton docks, though only partly complete at present, will provide two floating pontoons for flying-boat reception and mooring. A terminal building embodies rooms for Customs, passport and im-

migration procedure, and duplication of facilities ensures that conflicting passenger-movements are separated. Passenger amenities include rest rooms, restaurant and lounge bar, and there is a railway platform for trains to London.

The dock authority's immediate preparations for the arrival of a ship at Southampton are set in motion by the receipt of advice from either the shipping company, or the ship's agents, which contains such information as the vessel's name, expected date and time of arrival, number of passengers, and amount of baggage. The advice is then forwarded to the various departments concerned with the disembarkation, so that appropriate action may be taken. In preparation of the shed, a clean appearance is essential and the barriers must be suitably disposed to facilitate the movements of passengers, though also preventing them from establishing contact with friends, before being submitted to customs formalities.

The preparations for the receipt of passengers in the shed necessitate provision of low trestle tables for customs examination, desks for the payment of duty, and for a number of kiosks dealing with cables, money exchange, and railway tickets. Before the passenger boards the boat train, his baggage must pass over the scales, and due consideration must be given to the labour requirements for baggage handling at all stages of the procedure.

On receipt of the shipping company's advance information, the dock department can establish the number and composition of the trains that will be required, together with approximate times of departure. Though rolling stock occasionally is despatched to the docks by main-line depots, the docks department usually is able to provide stock from trains which previously have worked down boat trains and are already available at the dock.

A further saving in empty running between the docks and main-line depots has been effected by the provision of a carriage-cleaning depot at the docks, where facilities are available for washing-down, cleaning windows and brasswork, general interior cleaning, and steam heating. It also is possible to take on a water supply and gas for cooking purposes. The gas is received from the main-line depot in rail gas-tanks, from which it passes into a compressor and through underground pipes, to gas cocks installed at the side of the track. The depot boiler system for steam heating is maintained continuously during winter and steam passes from the boiler through overhead pipes to the carriage steam pipes.

It is usual for passengers to land about 1½ hours after the arrival of a vessel and for the first boat train to leave after a further 1¼ hours. In the case of some operations, the landing of passengers must be staggered and five or six boat trains may be involved. So as to allow for operations at the docks and for the clearance of passengers in London, it is usual for boat trains to leave at 45 min. intervals. A schedule for a representative passenger vessel handled at Southampton Docks would be as follows:—

2,200 passengers; 11,000 to 12,000 pieces of baggage; 1,600 passengers by boat train to London; 200 by private car; 300 by taxis to Central Station for places other than London and to local points.

Vessel arrived, 3.15 p.m.
Gangway in, 3.20 p.m.
Discharge of baggage commenced, 3.30 p.m.
First class passengers commenced to land, 4.55 p.m.
Boat train departed, 6.25 p.m.
Boat train departed, 7.20 p.m.
Cabin class commenced to land, 6.30 p.m. Boat train departed, 8.10 p.m.
Tourist class commenced to land, 7.50 p.m. Boat train departed, 9.07 p.m.
About 500 passengers remained on board for the night. These passengers (all classes) landed at 8 a.m. Boat train departed, 9.20 a.m.
Private cars meeting passengers, 201.
Taxis, 307.

Delays to shipping as the result of unfavourable weather, or other causes can in certain instances, be provided for by receipt of an early notification of the revised time of arrival from the shipping company.

In any case, it is imperative that the organisation should be able to deal with changed circumstances at short notice, and it must be appreciated that inability to maintain working schedules inevitably has repercussions on a variety of associated operations.

Consequently, revised timings of the boat trains must be acceptable to the operating department, to which these trains can cause a considerable problem at the peak periods of main-line traffic. In the dock, it may be necessary to adjust normal freight-train traffic and shunting, and due consideration must be given to impending passenger movements, in the event of which certain tracks must be kept in readiness.

Discharge of Baggage

To ensure that disembarkation will proceed smoothly, it is important that all baggage should be discharged and sorted before passengers commence landing. After conveyance by electric truck from the point of discharge to the shed interior, baggage is sorted alphabetically and then becomes the responsibility of the passenger for clearance through the customs. Dock labour is provided to assist the passenger in handling his baggage, which following the customs inspection, is conveyed either to the motorcar bay, or to the scales before being loaded into the boat train.

Taxi and private car movements are subject to strict control, as it is essential that they do not congest the shed, and at Southampton, private cars and taxis are called-up from a car park by means of a loudspeaker system.

Metal Warehouse at Lawley Street, Birmingham

A WAREHOUSE for the storage of non-ferrous metal and cement has been completed and put into use at Birmingham, Lawley Street, Goods Station of British Railways, London Midland Region. The warehouse formed part of a large scheme of reconstruction, which was undertaken as a result of the destruction by fire of Lawley Street Goods Warehouse in 1937 and was authorised by the L.M.S.R. directors in July, 1940, at an estimated cost of £30,000.

The steel-framed structure, 420 ft. long, with an overall span of 84 ft., comprises a single-storey warehouse with accommodation for 20 wagons on one side of the deck, and 3 cart bays each 18 ft. wide on the other. The deck, specially designed for the storage of heavy metals, has a space of 2,000 sq. yd. for metal, and 1,000 sq. yd. for cement. Adequate natural and artificial lighting is provided. A wagon traverser enables continuous feed, by capstan, of wagons into the shed and throw out empties on to the outside road.

New London Midland Region warehouse at Lawley Street, which has a deck specially designed for storage of heavy metals

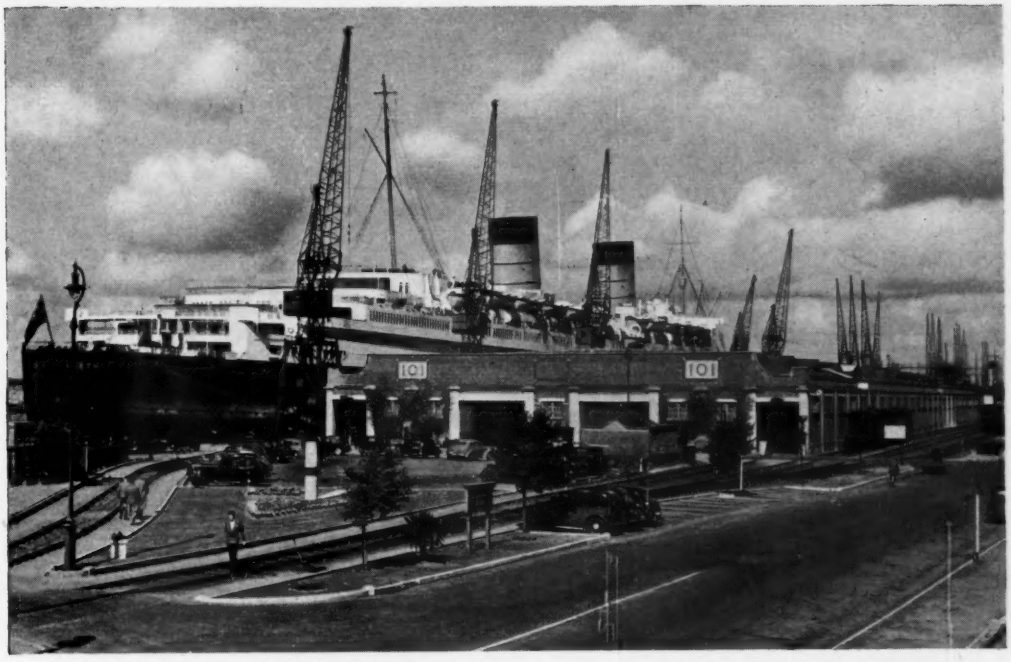
Lifting Facilities

A one-ton capacity mono-rail Walking jib crane, running on an eliptical track, serves ten wagons on one side of the deck, and two cart bays on the other; the intervening space of 2,000 sq. yd. is utilised for metal storage. The jib is designed to enter the door of a wagon at the lowest position, and deal with material both from and into high-sided wagons.

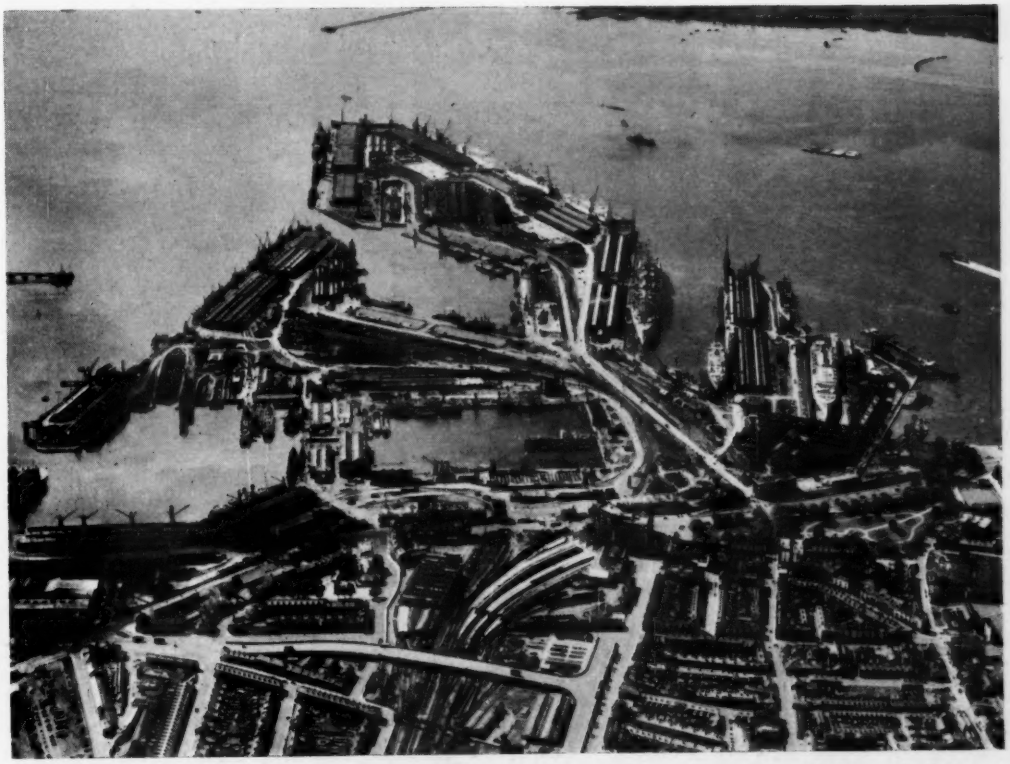
The building includes a single-storey office block with the usual staff amenities, the floor level of which is at the level of the deck. From this office the general working of the warehouse is supervised and the cart traffic entering the depot is controlled. The paving in the vicinity of the warehouse covers an area of 3,500 sq. yd.

The site of the warehouse was a portion of an old viaduct adjoining Landor Street, but the conditions prevailing during and since the war have been responsible for the considerable period which has elapsed between authorisation and completion of the work.

Handling Ocean Passenger Traffic at British Ports



Cunard White Star 83,673-ton liner "Queen Elizabeth" alongside the New Dock, Southampton



Recent aerial view at Southampton, showing the Inner, Outer, Empress, and Ocean docks

L.M.R. Diesel in Service on West Coast Route

L.M.R. coupled diesel-electric locomotives (Nos. 10000 and 10001) descending Shap Fell, Westmorland, drawing a West Coast route express (see editorial note)

Photo] *[J. Hardman*

French Railways "Door-to-Door" Exhibition

Inspection of rubber-tyred road trailer for carrying railway wagons at a French National Railways "Door-to-Door" Exhibition, Gare des Batignolles, Paris, on October 11

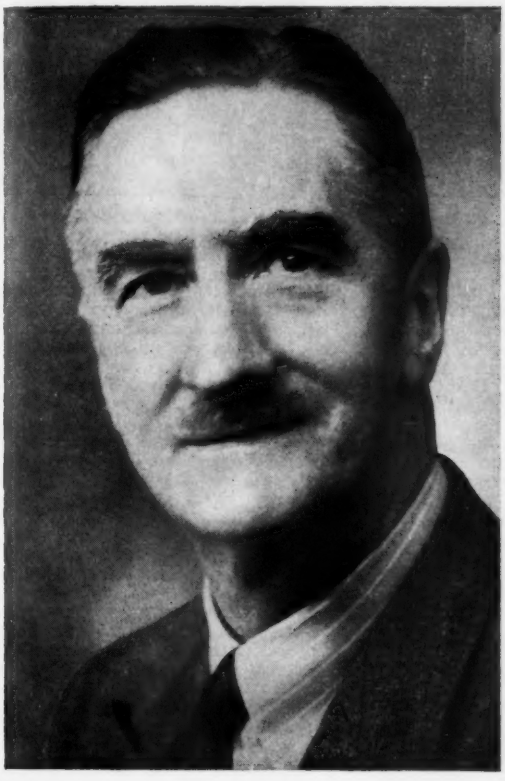
RAILWAY NEWS SECTION

PERSONAL

GENERAL SIR WILLIAM SLIM

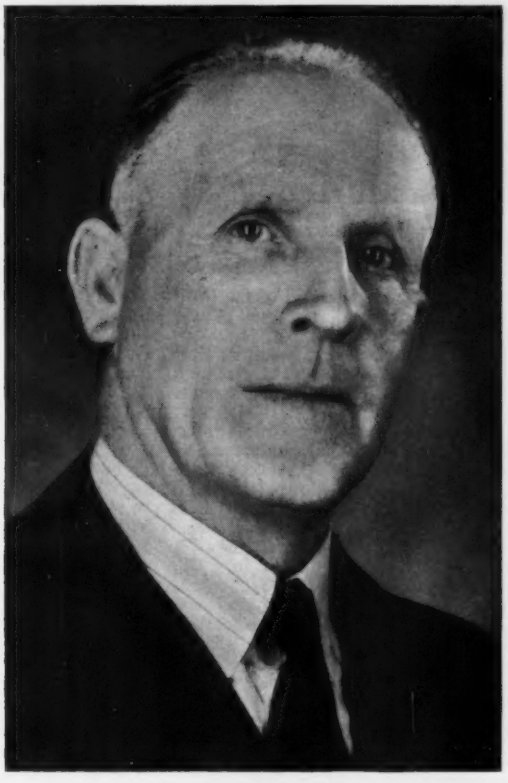
The War Office has announced that General Sir William Slim will assume his new appointment as Chief of the Imperial General Staff with effect from November 1. Sir William Slim is at present Deputy-Chairman of the Railway Executive.

Mr. A. Dalton, C.B.E., who, as recorded in our September 17 issue, has been appointed General Manager of the East African Railways & Harbours (the system formed recently by amalgamation of the Kenya & Uganda Railways & Harbours and the Tanganyika Railways & Port Services), was born at Cork on January 20, 1892, and entered the service of the Great Southern & Western Railway (Ireland) in the Goods Department at Cork in 1909. He was transferred to the General Manager's Office, Kingsbridge, in 1912. In the 1914-18 war, after service with the Royal Dublin Fusiliers in Gallipoli and France, he was transferred to the Royal Engineers in 1917, and was appointed Commanding Officer the 10th Light Railway Operating Company, which was then in France. He remained in that post until demobilisation in 1919. After returning for a short period to the General Manager's Office, G.S.W.R., at Kingsbridge, he was appointed Assistant Traffic Superintendent, Tanganyika Railways, in November, 1920, serving for a time as Personal Assistant to the General Manager, and reaching district rank in 1930. After acting as Traffic Manager of the Tanganyika Railways in 1935, he was appointed Assistant Superintendent of the Line, Kenya & Uganda Railways & Harbours, in 1936, and was promoted to Superintendent of the Line in 1938. In May, 1942, he was made Deputy General Manager of the Kenya & Uganda Railways & Harbours, retaining his appointment as Superintendent of the Line; and from January 1, 1948, was appointed Acting General Manager. When the undertakings of the Kenya & Uganda Railways & Harbours and the Tanganyika Railways & Port Services were amalgamated, as from May 1 last, under the title of East African Railways & Harbours, he was appointed Acting General Manager of the last-named system, of which he now becomes General Manager. Mr. Dalton was made a C.B.E. in the New Year Honours, 1942.



Mr. A. Dalton

Appointed General Manager, East African Railways & Harbours



Mr. F. C. Garside

Appointed Commissioner for Railways, New South Wales

At a recent meeting of the Managers' Conference held at the Irish Railway Clearing House, Mr. F. Lemass, General Manager, Coras Iompair Eireann, was elected Chairman of the conference for 1949.

Mr. Arthur Johnson, G.M., Overseas Engineer on the staff of the Superheater Co. Ltd., intends to leave England by air on October 26 for a tour of the railways of Africa. Mr. Johnson was until recently Deputy Chief Mechanical Engineer, Burma Railways.

Mr. Frederick Charles Garside, M.Inst.T., who, as recorded in our September 24 issue, has been appointed Commissioner for Railways, New South Wales, has occupied the post of Assistant Commissioner for Railways for the past sixteen years, and was Comptroller of Stores from 1922 to 1932. He entered the railway service as an apprentice fitter in 1903. Mr. Garside has taken an active interest in the activities of the New South Wales Centre of the Institute of Transport and the New South Wales Regional Group of the Institute of Public Administration, and he is a past-Chairman of both those organisations.

Mr. Arthur Frank Kirby, C.M.G., A.M.Inst.T., who, as recorded in our October 15 issue, has been appointed Superintendent of the Line, East African Railways & Harbours, has been until recently General Manager of the Palestine Railways. He was born in 1899, and was educated at Sir William Borlase's School, Marlow, and at London University. Mr. Kirby entered the service of the Great Western Railway in 1916. He served in France with the London Rifle Brigade, which he joined in 1917; and he was wounded in action in the next year. He returned to railway service in 1919, and four years later was selected for a course of training in all departments, on the completion of which he was attached to the General Manager's Office for special duties. In 1926 he qualified by examina-

Mr. A. F. Kirby

Appointed Superintendent of the Line, East African Railways & Harbours

Mr. R. Winsor

Appointed Assistant Commissioner for Railways, New South Wales

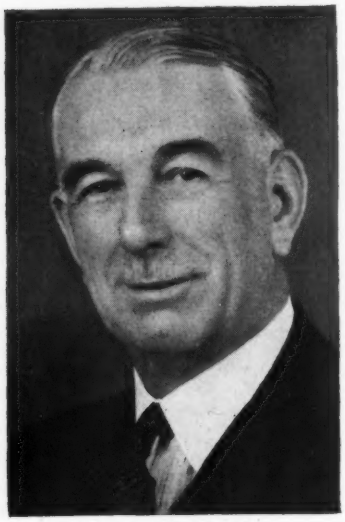
Mr. W. F. Barton

Signal & Telegraph Engineer, New South Wales Government Railways, 1932-48

tion for associate membership of the Institute of Transport, and was one of the first candidates to do so. He was appointed Assistant Secretary, Takoradi Harbour, Gold Coast Government Railway, in 1928; he acted on several occasions also as Assistant to the General Manager; and in 1936 he became Traffic Manager. He was Secretary to the Conference of General Managers of West African Railways in 1929, and to the Gold Coast Committee on Rail and Road Transport in 1930. Mr. Kirby went to Kenya as Assistant Superintendent of the Line, Kenya & Uganda Railways & Harbours, in 1938, and was appointed General Manager of the Palestine Railways in 1942. During his service in Palestine he was responsible for the expansion of the capacity of the railways of Palestine, Trans-Jordan and Sinai (Egypt) to cope with exceptionally heavy wartime traffic for the Middle East campaign. He initiated, and became Chairman of, the Palestine Transport Advisory Board, and was Chairman of the Board of Industrial & Scientific Research during its consolidation as a working body. He sponsored the creation of the Middle East Railways Conference Association. Mr. Kirby was made a C.M.G. in the King's Birthday Honours, 1945.

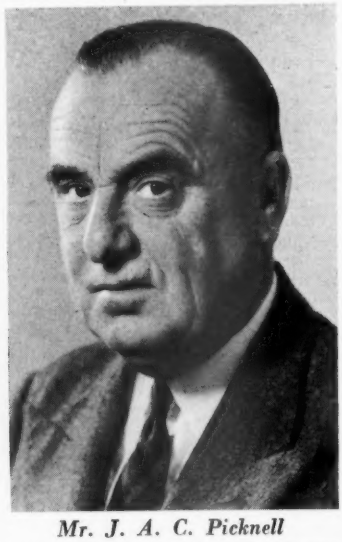
Mr. Reginald Winsor, who, as recorded in our September 24 issue, has been appointed Assistant Commissioner for Railways, New South Wales, entered the service of the Department of Railways as a probationer in 1906, and subsequently occupied a number of posts in the Traffic and Mechanical Branches. Since 1942 he has been Chief Staff Superintendent. Between 1931 and 1940 Mr. Winsor was President of the Railway & Tramway Officers' Association (now Australasian Transport Officers' Association).

Mr. Walter Frederick Barton, A.M.I.E. (Australia), M.I.R.S.E., Signal & Telegraph Engineer, New South Wales Government Railways, who retired on September 29 last, is 74 years of age, and has completed nearly 58 years of railway service in New South Wales. He was born in South Australia, and received his early education at Prince Alfred College and at the School of Mines & Industry, Adelaide. In 1890 he joined the South Australian Government Railways as a cadet in the Department of the Engineer-in-Chief, and in December of the same year he entered the Electrical Branch of the New South Wales Government Railways. For the first four years he was employed mainly in the installation of safe-working instruments on sections of double and single lines, and he also took a course of electrical engineering at Sydney Technical College. In 1894 he was appointed District Electrical Inspector, and in 1900 he transferred to the head office of the Electrical Engineer, under whose direction he was responsible for the installation and main-



Mr. J. W. Watkins

Appointed Operating Superintendent, L.M. Region, British Railways



Mr. J. A. C. Picknell

Assistant (Freight Services), Chief Operating Manager's Office, L.M.S.R., and L.M. Region, British Railways, 1946-48

Mr. W. Jeffers

Appointed Dock Manager, Swansea, Docks & Inland Waterways Executive

tenance of various signalling and safe-working systems, including the electro-pneumatic installation in Sydney station yard. In 1912, when a Signalling Branch, to deal with a comprehensive programme of power and automatic signalling, was created, Mr. Barton was appointed Assistant to the Signal Engineer. Later he was made Chief Assistant Signal Engineer, and for some years he was engaged on power signalling installations and on work associated with the electrification of the Sydney and suburban system. In 1924 he was sent by the Railways Department to America to study signalling and safe working. In 1929 he was appointed Signal Engineer, N.S.W.G.R., and in 1932 his duties were extended to include control of the telegraph and telephone systems, with the designation of Signal & Telegraph Engineer. Since 1932, under his direction, a complete system of telephone train control has been installed, and the telephone and communication systems remodelled and extended. During 1929-1948, great strides have been made in power and automatic signalling in New South Wales, particularly in respect of all-electric relay interlockings and remotely-operated power signalling equipment. Mr. Barton contributed an article on signalling and telecommunications in that State to the September 19, 1947, issue of *The Railway Gazette*. He is Chairman of the Australian Section of the Institution of Railway Signal Engineers, and a summary of his address at the inaugural meeting of that section was published in our December 19, 1947, issue.

Mr. J. W. Watkins, D.S.O., M.C., M.Inst.T., Assistant Operating Superintendent, London Midland Region, British Railways, who has been appointed Operating Superintendent, as from October 1, entered the service of the Midland Railway in 1905, as a junior clerk at Ashchurch, and served at several stations until he joined the ranks of the Gloucestershire Regiment in August, 1914, proceeding overseas in 1915. He subsequently received a commission in the field and was posted to the 2nd Battalion, Lancashire Fusiliers, serving with that regiment until May, 1918, and rising to the rank of Lt.-Colonel in command of the battalion. He was awarded the D.S.O. and the M.C., and was mentioned in despatches four times. He was wounded in May, 1918, and, after recovering, served in England until leaving the Army, with the rank of Lt.-Colonel, in July, 1919. On his return from Army service Mr. Watkins was posted to the headquarters staff of the Midland Railway, dealing particularly with staff matters, and continued in the same position until after the formation of the L.M.S.R. In 1926 he was appointed Assistant (Outdoor Section), Chief General Superintendent's Office, and, in 1932, Assistant Divisional Superintendent of Operation, Derby. In 1935, consequent on the merging of the traffic and motive-power responsibilities under the Divisional Superintendent of Operation, his designation was changed to Assistant Divisional Superintendent of Operation (Traffic). He was appointed Assistant Divisional Superintendent of Operation, Derby, in 1937, and Divisional Superintendent of Operation, Derby, in 1942. In 1944, he became Divisional Superintendent of Operation, Crewe, and in 1946 was re-designated Divisional Operating Manager, Crewe. Last January he was appointed Acting Assistant Chief Operating Manager, London Midland Region, and on July 1, 1948, became Assistant Operating Superintendent. Mr. Watkins comes of a family associated with the railway service for a number of years, his father having served for 50 years with the former Midland Railway.

Mr. J. A. C. Picknell, M.B.E., who, as recorded in our October 15 issue, retired recently from the position of Assistant (Freight Services), Chief Operating Manager's Office, London Midland Region, British Railways, entered the service of the L.N.W.R. in the Goods Department in 1905, and after experience at various stations was transferred to the Goods Manager's Office in 1907. In 1908 he went to the Office of the Superintendent of the Line at Euston, where he remained until 1921. He subsequently served at Manchester and Derby, and became District Controller at Rugby in 1929, and at Willesden in 1930. During the recent war he was attached to the Ministry of Fuel & Power as Transport Liaison Officer, for which services he was awarded the M.B.E. On leaving the Ministry he resumed for a time his previous position with the L.M.S.R.; before being appointed to headquarters as Assistant (Freight Services) in 1946. During his railway service Mr. Picknell, who is well known to his friends as "Joe Picknell," has served on many committees, and has been the author of several articles in his system's staff magazine.

Viscount Hambleden, Governing Director of W. H. Smith & Son Ltd., who died on March 31 last, aged 44, left (settled land grant £154,806) (unsettled estate already valued £2,933,199) £3,088,005.

Mr. W. Jeffers, who was recently appointed Dock Manager, Swansea, Docks & Inland Waterways Executive, entered the service of the Barry Railway and Barry Docks in 1913. On the amalgamation of 1922, he was transferred to the Staff & Labour Section of the then newly-formed Chief Docks Manager's Office of the Great Western Railway. He became Chief Clerk to the Cardiff Dock Manager in 1928; Assistant-in-Charge, Penarth Dock, in 1935; Outdoor Coal Shipping & Traffic Assistant, Cardiff Docks, in 1937; Assistant Dock Manager, Barry, in 1939; and Assistant Dock Manager, Cardiff, in 1941. In 1945 Mr. Jeffers was made Assistant to Chief Docks Manager, the post he vacates on his new appointment.

We regret to record the death on October 12, in his 83rd year, of Sir Peter Boswell Brown, J.P., M.I.C.E., formerly Chairman & Joint Managing Director of Hadfields Limited, from the board of which company he retired in 1945.

Mr. George Dodson-Wells, Chief Public Relations & Publicity Officer, London Transport Executive, is among those recently elected to Fellowship of the Royal Society of Arts.

Mr. James Maxwell, General Manager of Thomas Cook & Son Ltd., left London by air on October 21 for a 10 days' business visit to Egypt. On October 31, he will fly to Bombay, where he will review travel developments in the sub-continent since the creation of the new dominions of India and Pakistan.

Film Show for Mutual Improvement Class

A group outside the Pilot Theatre, Kings Lynn, after the recent film show to inaugurate the 1948-49 session of the Kings Lynn Locomotive Mutual Improvement Class (see paragraph in our October 15 issue)

Back row (left to right) Messrs. G. A. Donald, Locomotive Shed Master, South Lynn; A. H. Greeves, Manager, Pilot Theatre; R. Gomersall, Locomotive Shed Master, Cambridge; J. R. Whitbread, *The Railway Gazette*; L. Barkley, Editor, *Lynn News & Advertiser*; J. Wood, Secretary of class; E. Dix, Vice-chairman of class. *Front row (left to right)*: Mr. M. D. Thompson, District Goods & Passenger Manager, Cambridge; Captain L. Beesley, owner of Pilot Theatre; Messrs. E. J. Shaw, Locomotive Shed Master, Kings Lynn (President of class); F. R. Lankshear, Hon. Lecturer to class; A. H. Rees, District Locomotive Superintendent, Cambridge; V. G. Gilchrist, Locomotive Shed Master, March; G. Sutcliffe, District Superintendent, Cambridge.

Photo] ["*Lynn News & Advertiser*"

British Transport Organisation

Aims and progress of the British Transport Commission summarised by Sir Cyril Hurcomb

Sir Cyril Hurcomb, Chairman of the British Transport Commission, opened his paper, "The Organisation of British Transport," to the Railway Students' Association, on October 20, with a comprehensive survey of the scope of the Transport Act, 1947. He dealt with the British Transport Commission, transfer of the railways, long-distance road haulage undertakings, "C" licencees, passenger road transport and docks. The following is an abstract of Sir Cyril Hurcomb's comment on the organisation of the Commission and Executives, its problems and progress:—

The British Transport Commission is a small body which makes policy but does not itself operate transport. In this sense it may be compared to a full-time board of directors, but with the important differences that it is in constant session and that its responsibilities are greater and wider than those of a board of directors since they form the central, continuing organ of co-ordination, decision and control for the entire undertaking. It is the members of the Commission, who, with the aid of a small, carefully chosen staff, have to ensure that their transport business shall be conducted as a single undertaking and not as a collection of different undertakings, each pursuing its own aim.

It may seem at first a little odd that an Act which specifically lays on the Commission the duty of integrating transport, welding the different forms of transport into a single whole, should go on to provide no fewer than five separate Executives to operate transport and allied services. It may be said that such a scheme runs an obvious risk that each Executive may tend to be primarily concerned with its own form of transport to the exclusion of all wider considerations. The explanation is to be found in the size and complexity of the task which has to be performed.

Railway Transport

The Railway Executive has to begin by welding four very large railways, each with its own technique and traditions, into a single working unit. To ensure a smooth initial take-over, the six Regions into which British Railways are now divided have been based broadly on the former company networks, and although various adjustments are taking place at or near the boundaries of the Regions, it is so far only in Scotland that the organisations and services of two separate main-line companies have been merged into a single unit under one Chief Regional Officer.

Substantial changes in organisation, policy and practice are inevitable if the Commission is to seize its opportunities for greater economy and higher efficiency which unification brings and which it is its duty to seize. To ensure that these changes shall be thought out and brought about in reasonable time, the Railway Executive has been appointed in part on a functional basis. The strong functional element is partly balanced by part-time members drawn from the business world, and by a Chairman who has great managerial experience and no functional responsibilities.

It is important also to bear in mind the collective responsibility of the Executive as a whole. The specialist members themselves are men with wide professional knowledge and by no means devoid of administrative experience. Nevertheless, the emphasis is functional because it is desired to secure, first, the earliest possible analysis and comparison of differing company techniques and procedures with a view to standardising the best, and, secondly, the after-care, carrying through and adjustment of the determined policies in the light of accruing experience and new knowledge.

Road Transport

The Road Transport Executive has a task that is in some ways even more formidable. For while the Railway Executive is dealing with a relatively small number of very large units, and succeeds a wartime body—the Railway Executive Committee—that was already exercising some degree of unified control, the Road Executive is starting almost from scratch to bring together a very large number of small undertakings.

At a later stage this Executive will be concerned with the preparation of the area schemes for passenger road transport services which the Commission may prepare and submit to the Minister in accordance with Section 63 of the Transport Act. The Executive has begun to acquire by agreement a nucleus of large road transport firms round which the full structure of a unified organisation can be built. The great majority of the road haulage undertakings, however, will be acquired under the compulsory procedure laid down in Part III of the Act; and arguments may arise as to whether a given undertaking is or is not predominantly long-distance, and whether the conditions which the Commission may impose on the permits it issues amount to "substantial interference" with the business, in which event a claim to be acquired can be made. Already the requisite structure with its Divisional and District Officers is being built up.

In the canals, the Docks & Inland Waterways Executive takes over a form of transport that in recent years has been declining in relative importance, but that can almost certainly make a greater contribution than it is now making to national transport requirements.

The London Transport Executive has taken over an undertaking of great importance in which road and rail transport is already effectively integrated. It inherits the immense problem of dealing with London's peak-hour traffic, at a time when the maintenance of existing services, quite apart from any construction of new facilities, is being seriously impeded by a shortage of rolling stock and by the cuts in capital expenditure imposed to help in balancing our foreign trade accounts. We are fortunate here in having the Executive made almost ready to our hands in the London Passenger Transport Board with fifteen years of striking achievement and expert knowledge to its credit.

There has been some criticism of the machinery provided in the Transport Act for the operation and integration of nationalised inland transport on the ground that the management is largely composed of technical experts and that the place of the former railway boards of directors has been left unfilled.

The first answer to this particular criticism is that the functions of the old directors are discharged by the Members of the Commission who are not technical experts. The Commission deals with the broad questions of policy which were formerly the responsibility of the separate boards of directors, and has the advantage that, unlike the former boards, it can look at transport as a whole, undeflected by competing financial interests. The second answer is that, at Executive level, the work of the functional members will be co-ordinated by non-functional and non-technical Chairmen; and while parts of the administrative machinery, such as the Divisional and District organisation of the Road Transport Executive, have still to be built, much of the machinery, especially on the railway side, is already in operation and running itself in.

It is clear that each of the different forms of inland transport has its own special characteristics which make it better suited to some purposes than to others. Broadly, one might say that railways are providers of wholesale transport, while the road services provide retail transport, but this simplified distinction is subject to many qualifications and is perhaps less valid than it was before.

Canal transport suits heavy, bulky and fragile commodities where the saving from a cheaper rate is worth more than the extra time that may be taken on the journey.

If these different forms of transport can be integrated as the Act prescribes, it should be possible to provide a service that will be more efficient and economical than any form of transport could offer by itself.

But the process of integration will not be easily or quickly accomplished. The separate Executives have to begin by integrating their own sectors, and the fact that they are separate does not of itself encourage the wider outlook that must be achieved if integration is to be effective. Many of the staff of the Executives are experts in their own spheres, trained over many years to regard their particular form of transport as primary, and to look on other forms as, at best, auxiliary if not entirely superfluous.

It will be one of the main tasks of the Transport Commission to widen this outlook and to create among the whole of its staff a new transport mind or outlook.

At Executive level, care has already been taken to ensure joint consideration of all steps bearing on the co-ordination of services. But integration will depend largely on the activities referred to in Section 76 of the Act which lays on the Commission the duty of preparing charges schemes.

Charges Schemes

The Act gives the Commission almost complete freedom in formulating these charges schemes. It is clear that one of their objectives must be to aim at charges that will help to guide traffic to the form of transport best suited to carry it. But the difficulties of producing charges schemes that will do this and yet be generally acceptable are formidable. To be practical, the Commission must begin by taking account of the fact that much of the internal trade and business of this country has been built on railway charges evolved through a century of experience, and based broadly on the principle of not charging what the traffic would not bear.

That negatively stated principle produced many cuts in railway rates when road transport began to compete seriously for the more highly classified traffic carried by rail, and forced the railways to retain and extend millions of exceptional

rates which the Railways Act of 1921 was intended to replace by standard charges fixed to secure a standard revenue. It took seven years to prepare these standard charges, and by 1928, when the revision of rates had been completed, road transport had made many of them only figures on paper, inapplicable in practice. The Transport Act instructs the Commission to earn enough revenue to cover all costs, but it does not lay down how that is to be done. The Commission has to find that out; and it has to remember that one very definite limit on what it can charge is provided by the freedom given in the Act to traders and manufacturers to operate their own transport in "C" licensed vehicles. Road operating costs, therefore, are bound to be an important factor in determining the new scales of charges, and so it will be necessary to simplify the somewhat elaborate 21-class classification of the 1921 Act, paying more attention to what has been called "loadability" and less to the selling price of the traffic.

It has been argued that rail charges ought to be based solely on the cost of carrying the traffic. That is an attractive theory, but its strict application might have some startling results on the relativity of existing charges. Moreover, the net additional cost of carrying an extra consignment by rail can vary, from something quite substantial where the consignment happens to be the last straw that makes an extra train necessary, to practically nothing where the consignment can be included in a van that is travelling to the same destination.

Charges are to be rationalised and made to foster and develop integration of inland transport, guiding traffic to the form of transport best suited to carry it. In total, the charges levied have to yield enough revenue to cover rising costs; but obviously it will be desirable to avoid increasing them in such a way as to make it cheaper for traders to send their own goods in their own "C" licensed vehicles over journeys for which the Commission is capable of providing profitably.

Unification and Physical Development

The unification and physical development of a number of undertakings that have previously been separate offer considerable possibilities for improving the services rendered. The first step is to analyse and compare the different ways that each undertaking has developed of doing the same job and to sort out and examine the best features of these different ways. Having decided which is the best way, one can then proceed to standardise, taking full account of differing local requirements and conditions. Standardisation may, of course, have to be gradual, particularly if it entails large capital expenditure, and it has always to be clearly established that the expenditure on the change would yield a big enough saving to pay for itself.

Physical development is a field in which nationalisation has advantages. A nationalised undertaking can spend money on worth-while improvements, knowing—as private transport never knew—that it will not be open to other interests to enter the field and take the traffic that was to have justified the expenditure.

The field of staff relations is one in which the British Transport Commission starts with considerable advantages. For nationalisation is something for which the great majority of the rank and file staff in the railways have striven over many years. The new undertaking, therefore, enjoys from the beginning a large fund of staff goodwill. Some guarantee that it will take full advantage of this goodwill may be found in the fact that one of the five members of the Transport Commission, and the member of the Railway Executive responsible for all staff matters, were both secretaries of great railway trade unions, while three other Executives include members who have recently or in the past had long and close experience of the organisation of labour as officials of the Transport & General Workers' Union. No one knows better than they do the feelings and reasonable expectations of the rank and file of transport staff. In a transport undertaking, the goodwill and co-operation of the staff are especially important, because so many of the staff come into close and frequent direct contact with the public.

Towards Transport Integration

*Mr. David R. Lamb's presidential address to the Institute of Transport**

This is a period of transition towards "a properly integrated system of public inland transport." The Transport Act of 1947, which provides for public ownership and control of the railways, the canals and long-distance road transport, the eventual adjustment of port administration and the possible establishment of area schemes in respect of passenger transport, is a vital concern to every member of the Institute. Indeed it is destined to affect, for good or ill, the very life of the nation. A great responsibility rests on those who have undertaken to implement the Act, and in carrying out their difficult task they are entitled to, and should receive, the co-operation of every one of us.

At the same time, the methods they adopt in fulfilment of the task must inevitably invite criticism, and so long as this is constructive it will no doubt be welcomed, for those who have accepted this great responsibility desire above all to make the scheme a success, whatever their political convictions.

Whether transport be under private or public ownership the objects of its administration are the same—to provide an efficient and economical service, to afford fair remuneration to the staff and to yield a reasonable return on the capital invested. But whereas the private concern must aim essentially at the highest possible rewards for its shareholders, the public undertaking must have regard to the general interests of the community. In other words, it has to fulfil communal as well as administrative and technical functions.

The old adage that transport is the handmaid of industry is admirable so long as it is attuned to modern precepts of domestic service. The Transport Act of 1947 provides—Section 3 (2)—that "where the Commission are for the time being providing regular goods transport services of different kinds available between the same points, it shall be their duty to allow any person desiring transport for his goods between those points freedom to choose such of the services so provided as he considers most suitable to his needs."

This "freedom of choice" is a hard-won privilege of trade and industry but it presupposes an obligation that demands shall be reasonable. Traders, no less than—and perhaps more than—the general public, will benefit from an efficient transport service, and a condition of transport efficiency is that traffic should be guided into its most economical channels. Another condition precedent to freedom is that traders should use with discretion the right to carry their own traffic by road.

Transport developments should be considered in the light of transport needs as a whole, and the Commission have a right to be consulted with regard to highway programmes and street planning. With transport under State ownership there is nothing to prevent this; capital expenditure can now be encouraged or resisted directly according to relative needs, whereas in the past it was largely dependent on, or influenced by, the competitive factor.

Confronted, as they are, with the need for unifying transport, with economy and efficiency in the national interest, the Commission have first to examine each branch of transport and to ensure that it is being so administered as to achieve the advantages of unification. The organisation of the railways, for instance, must be such that, while providing for efficient day-to-day operation, it will in due course achieve the full benefits of unification. In theory, unification implies that the railways as a whole shall be managed as one system from one headquarters exercising functional control through divisional officers, on the same principles as those applying to any one of the former British railway companies, with the Railway Executive representing the management and the Transport Commission the board of directors. But can such a system of control be effective over so widespread and intricate an organism?

The present organisation, with Chief Regional Officers and with headquarters executive officers exercising functional control, was regarded as an initial and largely experimental step. Its efficacy has yet to be proved.

In some respects it must be embarrassing to the executants, particularly the Chief Regional Officers, who may feel that with the best will in the world they cannot achieve efficiency without full authority within their respective regions such as is enjoyed by the System Managers on the highly successful State-owned railways of South Africa.

Regional Authority

Second thoughts are often best, and an arrangement which gives full authority to the Chief Regional Officer and makes him the medium for all major directions from the Executive should, with proper understanding, secure the advantages obtainable from unification, provided the regions are kept within workable size and the importance of local contacts within the regions is fully appreciated. Precise instructions should, of course, be laid down regarding procedure in connection with plans for new works and equipment, and with respect to the ordering and allocation of locomotives and rolling stock to pre-determined standards; these must necessarily be

* Abstract of "Transport in Transition," Mr D. R. Lamb's presidential address to the Institute of Transport at the Jarvis Hall, Portland Place, London, on October 1

confined to the minimum number of types according to the requirements of the railways as a whole rather than to those of any particular region. Our new national transport organisation is designed to ensure maximum economy and efficiency under these several heads.

But everyone must realise that the railways have now to be worked as one system and not as six separate systems. This pre-supposes uniformity in regional organisation and in the designation of officers in tune with modern railway practice, not for the sake of uniformity but to facilitate control and to simplify dealings with the trading and travelling public. Moreover, unification implies that there is no longer any barrier to a national routeing of traffic and that all circuitous routes dating from "constituent company" days must be abandoned. The consequent adjustment of traffic flows and the wholesale alteration of working time-tables will involve close and prolonged study and may even involve the re-siting of many marshalling yards which had their origin in inter-company exchange points. But the task must be tackled—and satisfactorily accomplished—if full advantage is to be obtained from unification. This is but one of the major problems arising in this new era of transport. There are many others which can only be brought to light by careful examination of the railway structure as a whole, and someone must be free to do the thinking.

As regards the general transport organisation, I suggest it is highly important to avoid any misconception of functions or responsibilities as between the Commission on the one hand, and the Executives on the other. The distinction between the Commission as the directorial (or policy) body and each Executive as its agent or manager, should be constantly observed and care taken to avoid the assumption by the former of any of the functions or characteristics rightly assigned to the latter.

Traders' Road Transport

The Government's decision to exclude C-licence (traders') vehicles from the provisions of the Transport Act was hailed with relief and satisfaction by industry generally. In announcing the decision during the Committee stage of the Bill in the House of Commons on March 13, 1947, the Minister of Transport said: "Taking into consideration the difficulty in trade generally in the immediate post-war period, and the many matters that necessarily occupy the time of the managements of these organisations, the Government have decided not to proceed for the time being with the clauses dealing with C-licences." Mr. Barnes went on:—

"I should like to make the position perfectly plain. . . . If by any chance it is found that this facility is being in any way abused, we shall not hesitate to take the necessary steps to put it right. A large sum of public credit will be vested in the transport system, and it is essential that the systems should operate economically and efficiently. I said in the Second Reading debate that transport is, and cannot be other than, an overhead charge on the whole industry of the country. Therefore, it is vital that it should be efficient and economical. We shall not permit it to be undermined by the development of any practices such as those that developed in 1921 and onwards."

The statement, with its warning note, was justified, but it is difficult to appreciate the significance of the reference to "1921 and onwards." During that period the use of motor transport of all kinds developed because of its inherent advantages. Legislation was introduced to control the operation of road transport for hire or reward, but the principle of freedom of use of one's own vehicles for one's own business, and the inherent right of the individual to the use of the public highway, have always been conceded in this and most other countries.

Some people argue that complete freedom of operation for the C-licensee must deprive the Commission of a large volume of remunerative traffic, to the disadvantage of the public service. But should the public transport service be judged in isolation? Surely the interests of the community require that trade and industry should produce goods at selling prices which will attract the world's markets. If public transport services can provide suitable facilities at competitive prices the sensible trader will use these services whether they be State or privately owned. If, however, the trader can operate his own transport at a lower cost, or so secure a service otherwise unobtainable, he will continue to employ this method.

It must not be forgotten that, in comparison with the public carrier, the trader suffers the disadvantage of only being able to carry his own goods and of frequently incurring empty return journeys, a fact which must necessarily reduce the margin between his costs and the price of public transport.

The trader is not interested in operating his own vehicles for the sake of doing so, but solely for reasons of convenience and economy. Certainly it will be to his interest, in the long run, to employ his own transport only where he obtains a definite and substantial advantage by so doing. One important point arising from the continued freedom of the trader to use his own vehicle is the safeguard this provides against the dangers of a monopoly. The competition of the privately-owned road vehicle will undoubtedly spur State transport in its pursuit of efficiency and so be of benefit to the whole community.

Efficient coastwise shipping is an essential element in the transport system of this island community. Although, for good and sufficient reasons, coastal shipping has not been subjected to State acquisition, the new transport charges structure will have to be so designed as to provide revenue sufficient to maintain an effective and widespread coastal service.

The claims of coastwise shipping for safeguards against unfair competition from inland transport were first admitted by the Legislature in the Railways Act, 1921. Section 39 of this measure gave coastal shipowners the right to make representations to the Minister of Transport in respect of exceptional rates competitive with coastwise shipping, subject, however, to a certain onus of proof that the rates complained of were inadequate in relation to cost of service. Section 39 of the Road and Rail Traffic Act, 1933, also entitled coastwise owners to represent that "agreed charges," designed by the railway companies to meet road competition, placed them at an undue or unfair disadvantage.

These statutory provisions arose out of a recognition by Parliament of the importance of maintaining adequate coastwise services, a consideration which must apply with renewed force as inland transport becomes integrated. Successive Governments have acknowledgd the importance of coastal shipping as an essential part of the British mercantile marine and as a necessary, though independent, complement to road and rail. Only last year the present Minister of Transport, in his terms of reference to the Railway Rates Tribunal sitting as the Charges Consultative Committee to advise him as to the level of railway rates, specifically stated that the Committee was "to have regard to the importance of maintaining adequate coastwise shipping services."

The principle of consultation regarding charges, formerly recognised in agreements between the railway and coastal shipping companies, is now embodied in the Transport Act, which provides safeguards against inland transport competition detrimental to coastwise services.

Education

Apart from those aspects associated with transport nationalisation to which I have referred, there is the question of education in the sense of vocational training. One effect of State ownership must—or should—be to give the employee a livelier interest in the industry. The demand of the worker for a greater share of control can be accepted only if it presupposes, first, the attainment of that goal by merit within the industry, and, secondly, control designed to secure its greater efficiency.

As I see it, the function of the Institute is to set the standards whereby candidates can be admitted to membership by examination or other qualification and to widen technical knowledge by the promotion of study and discussion. On the other hand, it is the task of the Commission and, indeed, of all transport undertakings to devise means whereby their employees can receive such education and vocational training as will enable them to qualify for admission to the Institute. For this purpose one assumes that the Commission will set up a department under a qualified educationist with the duty of training the staff in the practice and theory of transport, so that ultimately all employees may have equal chances of promotion to the highest positions.

Employees of the Commission and of transport undertakings generally should be encouraged to prepare papers for, and to participate in, the proceedings of the Institute. I lay emphasis on the word "encouraged" because there has at times been some hesitancy to read papers or even to talk during discussions for fear of incurring the displeasure of one's employers or superiors. In some instances there has been a fairly rigid censorship of contemplated contributions. Surely we have reached the stage when we can regard such conventions as outmoded, when we can welcome new ideas even at the risk of adverse criticism, when we can allow the fullest freedom of expression within our Institute. Enlightened bodies, public or otherwise, will welcome constructive criticism.

INDIAN LOCOMOTIVE PURCHASES IN THE UNITED STATES.—It is reported that the Indian purchasing mission, which will reach Washington early next month, will award tenders, aggregating about $30,000,000 for the supply of another 270 locomotives. This tender will bring to approximately $73,000,000 India's expenditure on locomotives in North America in two years. The delivery of 383 broad- and metre-gauge locomotives is already well under way. Most of the 33 metre-gauge and many of the 50 broad-gauge locomotives ordered in Canada have been shipped already and delivery of a further 200 broad-gauge locomotives—half each from Canada and the United States—is to begin next February.

Dissolution of Buenos Aires Transport Corporation

Corporación de Transportes de la Ciudad de Buenos Aires, the mixed-economy Buenos Aires Transport Corporation, is to be dissolved in accordance with a recent decision by the Senate. The Government has been recommended to purchase the Corporation. The intention is to declare the Corporation's concession null and void on the ground that the undertaking has been unable, despite continuous financial assistance by the government, to fulfil its tasks. From its beginning in 1938, the Corporation's deficits have been mounting yearly. To enable the Government to act as the sole bidder, the assets of the Corporation are to be sold as a whole. During the liquidation period the services are to be carried on as at present, but on its conclusion a plan for the reorganisation of the transport services of Greater Buenos Aires is to be evolved in co-operation with the municipal Commission of Control. It is envisaged that the services should be operated by the State.

The decision of the Senate is now being considered by the House of Representatives. As there is no doubt that it will meet with the latter's approval the envisaged liquidation will become effective in the near future.

Amalgamation in 1938

As will be recalled, the Corporation was established in 1938 by the amalgamation of all Buenos Aires transport undertakings —underground, tram, bus and "micro bus" companies—the first three of which were mostly foreign-owned. The incorporation of the small bus undertakings in which Argentine capital had been prominent and which were earning good dividends, was a compulsory measure, though politically detrimental to the new Corporation because it appeared to be financial assistance by the "small" Argentine shareholders for the losses which the foreign capital of the Corporation was sustaining already at that time.

Apart from this moral disadvantage the Corporation has been handicapped from the outset by having to maintain the old low fares despite increasing costs, and particularly mounting wages and salaries. The flat fare on all services, irrespective of the length of journey, is 10 centavos, less than a halfpenny, a rate which was uneconomic in 1939. It is believed therefore that the coming reorganisation will include a substantial fare increase, and possibly a new system of fares based on distance. Otherwise, the new administration will be faced with the old deficit problem.

Speed Control Signalling Surveyed

(*Concluded from page* 463)

ramp outside the running rails, wiped by a car contact shoe, cancels the normal meaning of the button combination: should the signal be at "danger" a train-stop will operate in the usual way.

A centrifugal governor within the car has the relevant one of its contacts energised by the button combination so that brakes will be applied should the speed exceed the controlled maximum. This gives the great advantage of *continuous* speed supervision down gradients, by contrast with the intermittent supervision of other schemes.

On station approach and similar block sections, the button combination sets in operation a cam driven by one of the car axles; movement of this cam is thus a function of the movement of the train beyond the signal. This cam gives a progressively lower setting to the centrifugal switch mentioned previously, thus ensuring that the driver decelerates the train sufficiently on the approach to a station. This method, using extra car equipment, is a continuous form of time-release of successive train-stops. A normally decelerating train does not suffer emergency application of the brakes, hence, the fact that the train is under control having been proved, very close approach to its predecessor is permitted.

The simplicity of the new London Transport scheme, whereby no extra train equipment is required and the driver operates his train in the normal way, merely obeying signs and signals, has much to commend it. The very small time which could be saved further by the adoption of the several other much more complex devices described above militates against their adoption, at any rate at the present time.

Petter Oil Engines

Last week a demonstration was given at the Associated British Oil Engines Limited Causeway Works, Staines, of the progress which has been made in building up production of the latest range of Petter small diesel engines. With the co-operation of a number of manufacturers who use Petter engines as standard power units for their products, some 30 pieces of agricultural and industrial machinery powered by these engines were displayed. The factory at Staines which before its acquisition at the end of last year by the A.B.O.E. group had been engaged on the production of motorcars, was also open to inspection. The factory layout has been revised and modern machine tools, plant, and production methods have been introduced for the manufacture of these engines on a large scale.

At a luncheon presided over by Mr. Alan P. Good, Chairman of Associated British Oil Engines Limited, held before the demonstration, Mr. A. J. Bottomley, Secretary for Overseas Trade, complimented Mr. Good and his group of companies on the contribution they had made to the export drive, and said that the industry to which the company belonged was now producing at an annual rate of £25 million, compared with only £4 million before the war. The industry had been set a high direct export target of £1·4 million a month, or an annual rate of nearly £17 million.

Mr. Alan Good said that the factory at Staines has achieved considerable success in stepping up output per man-hour, on which they had been told the salvation of the country depended. It was the policy of his group of companies to confine its activities to the production of engines; in this way it did not compete with its customers and by specialisation was able to offer engines of improved efficiency and at lower cost.

Visit to Southampton Docks.—The Railway Students' Association, London School of Economics & Political Science, has arranged an all-day visit to Southampton docks for Saturday, October 30. The party may be restricted to 50 members and will leave Waterloo at 8.30 a.m.

Inter-Regional Cartage Supervisors' Course

Mr. David Blee, Member, Railway Executive, accompanied by Mr. A. A. Harrison, Executive Officer (Road Transport), Railway Executive, opening proceedings at St. Ronan's on October 11 *for the cartage supervisors' course referred to in our October* 15 *issue*

Notes and News

Senior Boiler Shop Foreman Required.—A senior boiler shop foreman is required by a large engineering works in India manufacturing boilers, locomotives, road rollers, and rolling stock. See Official Notices on page 479.

Institution of Locomotive Engineers.—On November 17, a paper entitled "History of Southern Railway Locomotives," will be read by Mr. C. S. Cocks before the Institution of Locomotive Engineers. The meeting will be held at the Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1.

Paper on the Transport Act, 1947.—Mr. D. Blee, Member, Railway Executive, will read a paper entitled: "Railways and the Transport Act, 1947," before the Metropolitan Section of the Institute of Transport, on November 1. The meeting will be held at Livingstone House, Broadway, S.W.1, at 6 p.m., and tea will be available from 5.30 p.m.

Report on Winsford Collision.—Lt.-Colonel G. R. S. Wilson, Inspecting Officer of Railways, in his report on the accident at Winsford, near Crewe, on April 17, says there was a grave breach of the regulations by a signalman, who gave the "train out of section" to Winsford Junction for the passenger train, although it had not passed his box. The accident took place when one train ran into the back of another which had been stopped by a passenger pulling the communication cord; twenty-four persons were killed and thirty-two were injured.

Push-Button Door Control on the Central Line.—On Monday next passengers on the Central Line will be able to open train doors themselves by pressing a button. Four trains will be converted to push-button control by this date and a further four trains will be altered each subsequent day. All Central Line trains will be converted before the end of November and an extension of the scheme

Passenger door operation on a Central Line train

to other lines will follow later. The system will apply at stations in the open and the following are the stations where it will operate: Perivale, Hanger Lane, West Acton, North Acton, Leyton, Leytonstone, Newbury Park, Barkingside, Fairlop, Snaresbrook, and South Woodford. At tunnel stations the guard will continue to open and close all doors from his own compartment. Trains were fitted for this system and used experimentally shortly before the war. Passengers who wish to enter or alight from a train will press a rubber-covered button, shown in the illustration below, which is surrounded by a yellow ring and placed beside every door on a train, both inside and outside. The pressing of the button will cause a single door or pair of doors only to open. Closing of the doors, however, will always be operated by the guard as at present. The push-button cannot be operated except when trains are stopped at a station and after the guard has operated a switch to allow passenger door operation.

South African Electric Locomotive Order.—In connection with the recent £2,000,000 order placed by the South African Railways & Harbours with the North British Locomotive Co. Ltd., Glasgow, and the General Electric Co. Ltd., Birmingham, for 40 main-line electric locomotives, which was reported in our October 1 issue, we are informed that all the axleboxes for the locomotives will be supplied by British Timken Limited, Birmingham and Northampton.

Macbeth Spike Anchors.—Exors. of James Mills Limited, Bredbury, wish to draw attention to its recent advertisement for Macbeth Spike Anchors appearing in our August 6 issue, under which the Number 3 Spike Anchor was incorrectly shown with a four-hole baseplate as representing a portion of the London Midland Region track. The L.M.R. standard baseplate is provided with six holes, for which the Number 3 Spike is equally suitable; an illustration of L.M.R. track fitted with these spikes originally appeared in our June 25 issue.

"G. J. Churchward." In Remembrance.—Arrangements have been made for the latest "Castle" class locomotive produced at Swindon Works to be named *G. J. Churchward*, who occupied with great distinction the office of Chief Mechanical Engineer of the Great Western Railway, for many years. In view of Mr. Churchward's renown as a Locomotive Engineer, the President of the Institution of Mechanical Engineers, Captain (E) W. Gregson, R.N.R., has been invited and has agreed to perform the naming ceremony at Paddington Station on Friday, October 29.

Valuation of Transport Securities.—After considering the arguments and evidence submitted at the hearing on September 16 and 17, bearing on an application by the British Transport Commission, pursuant to Section 17(3) of the Transport Act, 1947, the Transport Arbitration Tribunal has issued an Order, dated October 12, 1948, determining the values of the following securities specified in Part II of the Fourth Schedule to the Act:—

Name of body by which security was issued	Nature of security	Value per £100 nominal
		£
The Trent Navigation Company	6 per cent. debenture stock	110
	3½ per cent. debenture stock	100
	5 per cent. preference shares	90
	Ordinary shares ...	55

Winter Rail Excursions.—Half-day and evening excursions, at less than a single fare for the double journey, are to be continued during the winter months, instead of being terminated at the end of this month. The Railway Executive, in making this announcement, says that in spite of bad weather, the results from the re-introduction of these cheap facilities two months ago have been satisfactory, and their continuance will not only provide the public with day outing facilities at reasonably low fares, but, it is hoped, will result in additional revenue. These cheap fare facilities, which will be arranged by the Regions, will embrace seaside resorts, special events, including football and rugby fixtures, and on Sundays will be given between many big towns for visiting purposes.

Liverpool—Manchester Air Fares.—When new fares come into force on British European Airways between Liverpool and Manchester, next month, the charge will be 7s. single and 10s. return, compared with first class rail fares of 10s. 9d. and 13s. 5d. respectively.

The Institute of Transport.—At the Institute of Transport anniversary luncheon, which is being held on Tuesday, November 2, at 12.45 for 1.15 p.m., at the Connaught Rooms, Great Queen Street, London, W.C.2, the address will be given by Sir Eustace Missenden, Chairman of the Railway Executive.

Railway & Canal Securities (Conversion Date) Order.—The Minister of Transport has made the Railway & Canal Securities (Conversion Date) (No. 11) Order, 1948 (Statutory Instrument No. 2226), under paragraph 1 of Part II of the Fifth Schedule to the Transport Act, 1947. Copies of the Order are obtainable from H.M. Stationery Office, or through any bookseller, price 1d. net.

British Railwaymen Wanted in Australia.—The Premier of Victoria said recently that because of the acute housing shortage, prefabricated houses would go with the families of the 1,200 British railwaymen whom the Government of Victoria was seeking as immigrants. Victorian officials are now looking for a suitable type of house to take with the families. The normal wage of a railway porter in Victoria is £7.

Society of Engineers.—The next ordinary meeting of the Society of Engineers will be held in the apartments of the Geological Society, Burlington House, London, W., on Monday, November 1. The proceedings will open at 5 p.m. with a social gathering of members and visitors, tea being provided if possible, after which a paper will be given at 5.30 p.m., entitled: "Soil Mechanics and the Practical Engineer," by Mr. Charles B. Brown.

Montreal Locomotive Works Orders.—Montreal Locomotive Works Limited has orders for 171 steam locomotives (160 for export) and 40 diesel-electric shunters, for Canadian railways, with the 1,000-h.p. shunting locomotives in equal numbers for the Canadian Pacific and Canadian National. Like many other Canadian industries, the Montreal Locomotive Works finds difficulty in obtaining sufficient quantities of steel and other materials.

Inquest on Level-Crossing Death.—At Holme, Huntingdonshire, on October 18, an inquest was held on the body of a man who was killed by a train on a level crossing at Conington Fen, where six German prisoners died in similar circumstances last March. A verdict of accidental death was returned. The Coroner said that after the inquest on the Germans, he made representations to the Railway Executive for the adoption of safety measures, and he was told that a special inquiry was being made. A representative of the Railway Executive said that the Chief Regional Officer had told him that the Inspector's report on his inquiry after the Germans were killed contained a recommendation that there should be some measure of control at the

OFFICIAL NOTICES

None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

WANTED.—Senior Boiler Shop Foreman for large Engineering Works in India engaged in the manufacture of boilers, locomotives, road rollers, rolling stock, etc. Salary of Rs. 1,000 per month (£900 per year at present rate of exchange). Apply for full particulars and form of application to: MESSRS. TATA LIMITED, 18, Grosvenor Place, London, S.W.1.

RAILWAY STORE METHODS. By W. H. Jarvis, Great Western Railway. The necessity for training officers—Organisation of stores department—Stores accounts. Cloth. 7¼ in. by 5 in. 116 pp. With diagrams. 4s. *By post* 4s. 3d.

WANTED.—*Railway Gazette*, September 27, 1940, March 14, 1941, and Index Vol. 74.—STEFFENSEN, Ehlersvej 8, Hellerup, Denmark.

A DIESEL-ELECTRIC Rail Traction Sales Engineer is required by a large Midland Engineering concern. Salary up to £700 per annum according to qualifications and experience. Reply age, etc., to Box 474, T. & G., 101, St. Martin's Lane, London, W.C.2.

THE RAILWAY HANDBOOK provides the railway student with a collection of useful statistics and information relating to the railways of Great Britain and Ireland. In addition, in matters of international interest, such as speed and electrification progress, the book extends its scope to cover the whole world in order to present a complete picture of these increasingly-important developments. 120 pp. Dy. 8vo. Paper covers. *Price* 5s. *By post* 5s. 3d.

IMMEDIATE delivery unused Sentinel B.E. type Industrial Steam Locomotive, 100 h.p., standard gauge.—Write Box 664, DORLAND ADVERTISING, 18/20, Regent Street, S.W.1.

STANDARD MILITARY RAILWAY BRIDGES. By F. S. Bond. A description of the different types of bridges designed for rapid erection in the field by the Allied Forces, and of the various methods employed in such erection. 28 pages. 9 in. by 12 in.; fully illustrated. Paper cover, 5s. *By post* 5s. 2d.

TRANSPORT ADMINISTRATION IN TROPICAL DEPENDENCIES. By George V. O. Bulkeley, C.B.E., M.I.Mech.E. With chapters on Finance, Accounting and Statistical Method. In collaboration with Ernest J. Smith, F.C.I.S., formerly Chief Accountant, Nigerian Government Railway. 190 pages Medium 8vo. Full cloth. *Price* 20s. *By post* 20s. 6d.

crossing. Efforts were now being made to seek the best method of effecting that control.

Department of Scientific & Industrial Research.—The Information Section of the Department of Scientific & Industrial Research has moved to Lower Regent Street. For the time being the remainder of headquarters of the department will remain at 24, Rutland Gate, London, S.W.7. The new address of the Information Section is: The Department of Scientific & Industrial Research, Rex House, Regent Street, London, S.W.1. The telephone number is Whitehall 9788.

L.M.R. Stations Competition.—Stationmaster J. R. Noddle, of Bricket Wood, Herts., and his assistants, Signalmen Ben Holman and Bill Pratt, who early this year collected 40 tons of soil and 60 tons of rock from nearby stations to make a station garden, have won a £10 first prize in the British Railways. London Midland Region, Best-Kept Stations Competition. Other winners in the London area were Kenton (£5), Walthamstow (£4) and Stanmore (£4). A feature of the competition was the appreciation expressed by the travelling public, and regular travellers have aided L.M.R. stationmasters in beautifying stations by giving plants, seeds, and advice. Altogether 550 stations on the London Midland Region entered for the competition this year, or an increase of 50 per cent.

Increase in Italian Railway Fares Proposed.—It is reported by Reuters that the Italian Government is considering making a general increase of 50 per cent. in railway fares.

New Petbow Limited Factory.—A new works, recently acquired by Petbow Limited at Richborough, Sandwich, is devoted to the manufacture of arc welding plant, equipment and electrodes, and already is in production to a substantial extent. The site area approaches 70 acres and has about a mile of main road frontage, as well as a siding from the Southern Region of British Railways. The powerhouse which feeds the works with electricity is equipped with Petbow generating plant, and water and compressed air also are supplied by Petbow plant. The address of the new factory is: Richborough Works, Sandwich, Kent, and the nearest stations are Ramsgate and Sandwich. Petbow Limited is retaining its works at Balmoral Road, Watford, to which, for the time being, all correspondence should still be addressed.

Railway Wage Claim Hearings.—Representatives of the N.U.R. met the Railway Executive on Wednesday to receive a reply to the union claim for a wage increase of 12s. 6d. a week. Last Monday the London Transport Executive rejected a similar claim, and the Hotels Executive is expected to announce its decision today. When the replies of the three Executives have been received the executive committee of the N.U.R. will meet to consider its next step. Several token strikes already have been staged. Last Monday about 7,250 men at Glasgow were involved in depot stoppages, while at Stratford Works, Eastern Region, 3,000 stopped work for two hours

Valuation of Transport Securities.—After considering the arguments and evidence submitted at the hearings on October 7 and 8, bearing on applications by the British Transport Commission, pursuant to Section 17(3) of the Transport Act, 1947, the Transport Arbitration Tribunal has issued Orders, dated October 12, 1948, determining the values of the following securities specified in Part II of the Fourth Schedule to the Act:—

Name of body by which security was issued	Nature of security	Value per £100 nominal
The King's Lynn Docks & Railway Company	4½ per cent. debenture stock	£90
	5 per cent. preference stock (1884)	£3
	4 per cent. preference stock (1869)	£50
	4 per cent. consolidated preference stock	£15
	Capital stock ...	£2
	Extension capital stock	£1
The Company of Proprietors of the Herefordshire & Gloucestershire Canal Navigation	7½ per cent. preference shares of £20 (fully paid)	£244 8s. 9d.
	Ordinary shares of £100	None outstanding
	Ordinary shares of £140	5s.

Engineering Lectures to L.C.C. Schools.—On Wednesday, October 20, a lecture on "One Hundred Miles an Hour by Train," by Mr. Cecil J. Allen, the first of a series of lectures arranged by the Institution of Civil Engineers, the Institution of Electrical Engineers, and the Institution of Municipal Engineers for L.C.C. Schools, was given at the Institution of Civil Engineers, London. The second lecture will be on Wednesday, November 17, on "The Wonders of Bridge Building," by Mr. H. Shirley Smith, and the third on Wednesday, December 8, on "Telecommunications. Telephone, Telegraph and Radio," by

Best-Kept Stations Competition, L.M.R.

Signalmen Ben Holman and Bill Pratt who, with Stationmaster J. R. Noddle, of Bricket Wood, won the first prize for the London area in the L.M.R. best-kept stations competition

Captain C. F. Booth. This is part of the general scheme whereby lectures on engineering subjects such as electricity, water supply, drainage, roads, and planning (combined with visits to works whenever practicable) can be made available for the older boys and girls in schools. The remaining lectures in this series will cover subjects such as: "The Romance of London's Water Supply," "London's Electricity," and "Methods and Purposes of Tunnelling."

The 25-Mile Radius.—A decision has now been given in another application that has been regarded as a test case in regard to the fixing of operating centres for road transport goods vehicles. In this the operator applied to the Licensing Authority for the Metropolitan Area for all four points from which the company operated vehicles to become operating centres, instead of the main office of the company. The application was granted, but it was emphasised that there was no intention of fixing notional operating points; the operating centres granted were the actual bases from which the vehicles had been worked for a long period.

Forthcoming Meetings

October 22 (*Fri.*).—Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1, at 6 p.m. Presidential address by Captain (E) W. Gregson, R.N.R.

October 22 (*Fri.*).—Institute of Transport, Tees-Side Section, Middlesbrough, at the Cleveland Scientific & Technical Institution, at 7 p.m. "The 1947 Blizzard on the Railways," by Mr. J. T. Thompson.

October 22 (*Fri.*).—Society of Engineers, at 17 Victoria Street, London, at 6.30 p.m. Informal Address by the President, Mr. E. E. Turner.

October 23 (*Sat.*).—British Railways, Southern Region, Lecture & Debating Society. Visit to Tilmanstone Colliery, N.C.B. (Men members only.)

October 27. (*Weds.*).—Institute of Welding, at the Institution of Civil Engineers, Great George Street, London, S.W.1, at 6 p.m. Presidential address, by Dr. J. H. Paterson.

October 28 (*Thurs.*).—Institution of Railway Signal Engineers, at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, London, at 6 p.m. "Modified Relay Interlocking in Sweden," by Mr. Ture Hard, Chief Signal Engineer, Swedish State Railways.

October 28 (*Thurs.*).—British Railways, Southern Region, Lecture & Debating Society, at the Chapter House, St. Thomas Street, London Bridge, at 5.45 p.m. "A Visit to the Netherlands State Railways," by Mr. N. L. Collins.

October 29 (*Fri.*).—Institution of Mechanical Engineers, Storey's Gate, London, S.W.1, at 6 p.m. Joint meeting with the Institution of Electrical Engineers. "High-Pressure Steam Power Plant," by Mr. W. N. C. Clinch.

October 29 (*Fri.*).—Institution of Railway Signal Engineers, annual dinner and dance at Hamilton Hall, Abercorn Rooms, Great Eastern Hotel, Liverpool Street Station, at 6 p.m.

October 30 (*Sat.*).—Railway Students' Association, London School of Economics & Political Science. Visit to Southampton Docks, leaving Waterloo 8.30 a.m.

Railway Stock Market

Business has been on a larger scale and dealings earlier in the week reached their best level since June. There has been an outburst of activity in iron and steel shares arising from the hope that in the event of nationalisation shareholders will be "compensated" on the basis of the value of assets rather than on the average prices of shares over a period. The market is pointing out that where assets values have been the bases, notably colliery companies, Tillings, and other road transport concerns, shareholders have been treated much better than in the case of the railways, where the basis was the market value of stocks.

British Funds have suffered a relapse, due to selling earlier in the week pending the issue terms of the British Electricity Authority loan, which it was assumed would be a 3 per cent. stock, but opinions differed whether it would be offered at par or at a slight discount. As a result, long-dated 3 per cent. stocks lost some ground, 3 per cent. Transport coming back to par and changing hands down to 99⅞ before strengthening, the lower price subsequently attracting buyers, particularly as it carries 16s. accrued interest. In accordance with the trend in gilt-edged stocks at the beginning of the week, other Transport issues receded, the 1967-72 stock being 100¼, and the 1968-73 stock 101½, while Electricity 3 per cent. stocks were 101-9/16.

The foreign railway market was featured by a strong demand for Leopoldina debentures on the assumption that in the event of eventual take-over developments these stocks must prove to be worth well above current levels. The 4 per cent. debentures improved to 68½, while the 6½ per cent. rose sharply to 85½, and Leopoldina Terminal debentures were 64½. Leopoldina preference was better at 37¾, and the ordinary stock (11½) was little changed on balance. Rise in the debenture stocks was attributed mainly to reinvestment of money arising from the Argentine rail pay-out. Great Western of Brazil showed small movements around 105s. In other directions there was again a fair amount of business in Manila Railway and the "A" debentures were 90½ with preference 10s. 3d. It is difficult to assess the value of these stocks as this turns on the value of the Manila Railroad holding. Beira Railway bearer shares at 62s. 6d. lost part of an earlier rise. Uruguay rails have been firm on approval of revised share-out terms. Some stocks, however, are still below these levels. Central Uruguay ordinary was 11½ and the second debentures 82. Elsewhere Antofagasta preference became firmer at 58 with the ordinary stock at 10. Canadian Pacific, after an initial improvement, came back to 21½. Mexican Railway 6 per cent. debentures were 86. San Paulo has been firm at 177 and the view persists that eventually this stock may prove to be worth 200.

Road Transport shares were again very firm with Scottish Motor Traction touching the new high level of 117s. in response to the view that they should be worth at least 120s. assuming adequate compensation. Tillings showed small fluctuations around 120s. awaiting news as to how the directors propose to deal with the £24,800,000 from British Transport. There have been sharp fluctuations in B.E.T. stock, which, after a further sharp rise, came back to £2,045. Prominent in the upward movement in iron and steels, Dorman Long were 34s. 6d., Colvilles 38s. 6d., Stewarts and Lloyds 58s. 9d., and Hadfields 30s. 3d. Vulcan Foundry shares changed hands at 28s., Beyer Peacock around 24s., and North British Locomotive marked 24s. 10½d. Wagon Repairs 5s. shares were 22s. and Gloucester Railway Carriage & Wagon 62s. Charles Roberts shares remained held tightly in view of the possibility of a return of capital. T. W. Ward have further improved to 64s.

Traffic Table of Overseas and Foreign Railways

	Railways	Miles open	Week ended	Traffics for week: Total this year	Traffics for week: inc. or dec. compared with 1946/47	No. of week	Aggregate traffics to date: Total 1947/8	Aggregate traffics to date: Increase or decrease
South & Central America	Antofagasta... ...	811	10.10.48	£ 57,520	+ £ 10,308	40	£ 2,205,640	+ £ 474,988
	Bolivar	174	July, 1948	$28,960	− $69,357	30	$471,287	− $301,893
	Brazil	—	—	—	—	—	—	—
	Cent. Uruguay ...	970	2.10.48	29,931	+ 340	13	436,487	− 9,106
	Costa Rica	281	July, 1948	35,904	+ 5,239	9	77,536	+ 14,013
	Dorada	70	Aug., 1948	34,163	− 3,063	30	209,829	− 34,071
	G.W. of Brazil ...	1,040	9.10.48	35,400	− 8,400	40	1,287,500	− 13,300
	Inter. Ctl. Amer. ...	794	Aug., 1948	$996,899	− $52,158	35	$9,169,618	+ $157,550
	La Guaira	22¾	Sept., 1948	$101,522	− $4,339	39	938,856	− 49,239
	Leopoldina	1,920	9.10.48	51,675	− 10,242	40	2,262,230	− 458,147
	Midland Uruguay ...	319	Aug., 1948	22,288	+ 5,183	8	45,295	+ 11,146
	Nitrate	382	15.10.48	13,671	+ 7,583	41	245,594	+ 66,952
	N.W. of Uruguay ...	113	Aug., 1948	4,784	+ 800	8	10,013	+ 2,566
	Paraguay Cent. ...	274	8.10.48	G116,328	+ G45,818	42	G1,440,367	+ G639,616
	Peru Corp. ...	1,059	Sept., 1948	196,290	+ 10,710	13	547,471	+ 29,708
	Salvador	100	July, 1948	c85,000	+ c10,000	4	c85,000	+ c10,000
	San Paulo	153½	—	—	—	—	—	—
	Taltal	156	Sept., 1948	8,255	+ 2,845	13	23,760	+ 7,345
	United of Havana ...	1,301	9.10.48	40,528	− 7,786	17	628,295	− 251,600
	Uruguay Northern	73	Aug., 1948	935	− 105	8	2,105	− 72
Canada	Canadian National...	23,473	Aug., 1948	10,110,000	+ 855,250	35	77,676,250	+ 5,854,000
	Canadian Pacific ...	17,037	Aug., 1948	7,735,500	+ 1,083,250	35	55,397,000	+ 4,108,000
Various	Barsi Light† ...	202	Sept., 1948	18,600	− 315	26	155,092	− 4,470
	Beira	204	July, 1948	122,639	+ 24,114	43	1,171,283	+ 243,861
	Egyptian Delta ...	607	10.9.48	19,946	+ 1,709	23	291,055	+ 29,461
	Gold Coast ...	536	Aug., 1948	158,926	+ 2,524	22	1,020,332	+ 236,755
	Manila	—	—	—	—	—	—	—
	Mid. of W. Australia	277	Aug, 1948	28,670	+ 6,667	8	52,657	+ 9,172
	Nigeria	1,900	July, 1948	504,437	+ 130,659	17	1,796,629	+ 380,119
	Rhodesia	2,445	Sept., 1947	643,980	+ 102,833	52	6,787,603	+ 612,938
	South Africa ...	13,347	25.9.48	1,325,832	+ 96,109	25	33,716,803	+ 1,928,160
	Victoria	4,774	June, 1948	1,358,791	+ 248,144	52	—	—

† Receipts are calculated @ 1s. 6d. to the rupee